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VIDHANA SOUDHA

BANGALORE

# REPORT OF THE COMMITTEE

*Constituted in*

G.O. No. P.W. 2771-77, DATED 2ND JULY 1956

*December 1956*

## Volume III—ANNEXURES

BANGALORE :
PRINTED BY THE DIRECTOR OF PRINTING, STATIONERY AND
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# CONTENTS


| | | | | | | |
|---|---|---|---|---|---|---|
| 1 | Annexure | I | Chapter | II | ... | Probable Estimate for the construction of the Houses of Legislature—Both stages. |
| 2 | Annexure | II | Chapters | III & IV | ... | Instructions of the Chief Minister. |
| 3 | Annexure | III | Chapter | VI | ... | Contour Plan of site, with formation levels. |
| 4 | Annexure | IV | Chapter | VI | ... | Elevation with portico, deleting the front flight of steps. |
| 5 | Annexure | V | Chapter | VIII | ... | Note on Datas of certain items of works. |
| 6 | Annexure | VI | Chapter | IX | ... | Note on designs. |
| 7 | Annexure | VII | Chapter | X | ... | Abstract estimate for Rs. 120 lakhs. |
| 8 | Annexure | VIII | | ,, | ... | Modified abstract estimate for Rs. 120 lakhs. |
| 9 | Annexure | IX | | ,, | ... | General abstract estimate of Rs. 130 lakhs. |
| 10 | Annexure | X | | ,, | ... | Letter No. 8100, 14th December 1956, from the Executive Engineer, V. S. Division, to the Secretary, V.S. Enquiry Committee. |
| 11 | Annexure | XI | | ,, | ... | Inspection note of the Chief Engineer of 7th June 1956. |
| 12 | Annexure | XII | | ,, | ... | Comparative statement of Rs. 50-lakh and Rs. 130-lakh estimates. |
| 13 | Annexure | XIII | | ,, | ... | Statement of items of work, where there are large variations in quantity and cost between the Rs. 50-lakh and Rs. 130-lakh estimates. |
| 14 | Annexure | XIV | Chapter | XI (a) | ... | Letter No. 79, 30th September 1954 from the Assistant Superintendent, V.S. Division, to the Superintendent, B.P. and L., City Area, Bangalore. |
| 15 | Annexure | XV | Chapter | XI (b) | ... | Distribution system of water supply scheme. |
| 16 | Annexure | XVI (i) | Chapter | XI (c) | ... | Data for $\frac{3}{4}$" premixed carpet and Seal coat work. |
| 17 | Annexure | XVI (ii) | Chapter | XI (c) | ... | Abstract estimate for Rs. 61,500 for the construction of 50 garages. |
| 18 | Annexure | XVII | Chapter | XII | ... | Important objections raised by the Accountant General in his inspection reports, and remarks of the committee. |
| 19 | Annexure | XVIII | Chapter | XIII (a) | ... | Cement and steel accounts, Documents 10, 11 and 12 of Vol. II. |
| 20 | Annexure | XIX | | ,, | ... | Values of stock balance, as per monthly accounts and half-yearly returns. |
| 21 | Annexure | XX | | ,, | ... | Physical verification of stock articles as on 22nd October 1956. |
| 22 | Annexure | XXI | Chapter | XIII (e) | ... | Differences in rates of different items in different sub-divisions. |
| 23 | Annexure | XXII | Chapter | XIII (e) | ... | Details of Nominal Rolls, showing excess of issues of materials. |
| 24 | Annexure | XXIII | | ,, | ... | Details of Nominal Rolls, showing excess of issues of materials. |
| 25 | Annexure | XXIV (i) | Chapter | XIV (a) | ... | Cash advances to sub-division officers. |
| 26 | Annexure | XXIV (ii) | Chapter | XV (a) | ... | Letter No. 1169, V.S —8th January 1954, from the Special Engineer to the Chief Engineer. |
| 27 | Annexure | XXV | | ,, | ... | Letter dated 2nd February 1954 from Sivaram D. Ubhayakar to the Chief Engineer, with the price list of spare parts. |
| 28 | Annexure | XXVI | | ,, | ... | Letter No. 9970, 29th January 1954 from the Chief Engineer to Government. |
| 29 | Annexure | XXVII | | ,, | ... | Letter No. D.O. 1348, V.S. of 13th February 1954 from the Special Engineer to the Chief Engineer of Mysore. |
| 30 | Annexure | XXVIII | | ,, | ... | Statement of the Special Engineer showing dates on which the several vehicles were put on road. |
| 31 | Annexure | XXIX | Chapter | XV (a) | ... | Letter No. S.P.C. 59377-410, 18th February 1954 from the S.P.C. Secretary to firms —Enquiry No. 12219. |
| 32 | Annexure | XXX | | ,, | ... | Letter No. nil dated 4—5th March 1954 from the Chief Engineer to the Secretary, S.P.C. |
| 33 | Annexure | XXXI | | ,, | ... | Extract from enquiry No. 12219 of S.P.C. with noting, and President's agreement thereon. |
| 34 | Annexure | XXXII | | ,, | ... | Letter No. S.P.C. 63523, 11th March 1954, from S.P.C. Secretary to Sivaram D. Ubhayakar. |

| | | | | | | |
|---|---|---|---|---|---|---|
| 35 | Annexure | XXXIII | Chapter | XV (a) | ... | Letter dated 11th March 1954, from S.P.C. Secretary to Sivaram D. Ubhayakar, placing order—Local Indent No. 14289. |
| 36. | Annexure | XXXIV | | ,, | ... | Letter No. 18-4—V.S., 5th April 1954, from Special Engineer to the Chief Engineer with inventories. |
| 37 | Annexure | XXXV | | ,, | ... | Statement of details of mileage covered by Desoto Lorries during February 1954. |
| 38 | Annexure | XXXVI | | ,, | ... | Statement of mileages of vehicles for the period September 1953 to June 1954. |
| 39 | Annexure | XXXVII (i) | | ,, | ... | Statement of details of mileage covered by Desoto Lorries during March 1954. |
| 40 | Annexure | XXXVII (ii) | | ,, | ... | Statement of details of mileage covered by Desoto Lorries during April 1954. |
| 41 | Annexure | XXXVIII | | ,, | ... | Details of Dodge heavy duty vehicles. |
| 42 | Annexure | XXXIX | | ,, | ... | Statement of extract from log book of Dodge vehicles (V.S. 17 to V.S. 24). |
| 43 | Annexure | XL | Chapter | XV (b) | ... | Comparative statement of flooring in the Rs. 50-lakh and the Rs. 130-lakh estimates. |
| 44 | Annexure | XLI | | ,, | ... | Comparative statement of tenders for flooring work. |
| 45 | Annexure | XLII | | ,, | ... | Order of the Chief Engineer dated 1st December 1954 on the flooring tenders. |
| 46 | Annexure | XLIII | | ,, | ... | Letter No. 9005-06, 4th December 1954 from the Chief Engineer to Government. |
| 47 | Annexure | XLIV | | ,, | ... | Letter No. 134, V. S. dated 3rd May 1956 from the Special Engineer to the Chief Engineer. |
| 48 | Annexure | XLV | | ,, | ... | Comparative statement of flooring details, as per tender, provision in Estimate, recommendations of Technical Committee and execution. |
| 49 | Annexure | XLVI | | ,, | ... | Benefits to the tendered contractor on the flooring and allied works. |
| 50 | Annexure | XLVII | Chapter | XV (b) | ... | Note on loss to Government in flooring works. |
| 51 | Annexure | XLVIII | Chapter | XV (c) | ... | Purchase of Jungle wood planks from October 1953 to January 18, 1954. |
| 52 | Annexure | XLIX | | ,, | ... | Purchases of Jungle wood planks from 19th January 1954 to 15th March 1955. |
| 53 | Annexure | L | | ,, | ... | Statement of Jungle wood planks, etc., supplied by the contractors. |
| 54 | Annexure | LI | Chapter | XV (c) | ... | Purchases of Centering materials from M/s. Kempiah Sons & Co., for the period 16th March 1955 to 18th June 1955. |
| 55 | Annexure | LII | | ,, | ... | Abstract of supplies of Centering materials received up to 4th September 1956 from different contractors. |
| 56 | Annexure | LIII | | ,, | ... | Total purchase of centering materials from October 1953 to end of August 1956. |
| 57 | Annexure | LIV | | ,, | ... | Note of the Special Engineer dated 4th September 1956 on Jungle wood planks and scantlings. |
| 58 | Annexure | LV | Chapter | XV (c) | ... | Counting of Jungle wood planks on 24th November 1956. |
| 59 | Annexure | LVI | Chapter | XV (e) | ... | Sub-Committee's report on Sound Reinforcement system. |
| 60 | Annexure | LVII | Chapter | XV (f) | ... | Details of receipts of Casuarina poles from different contractors to end of September 1954. |
| 61 | Annexure | LVIII | | ,, | ... | Correspondence with Sri Rama Metal Works, and Sri Rama Trading Co. |
| 62 | Annexure | LIX | Chapter | XVII | ... | Office note relating to Cement loan to M/s. Kempiah Sons & Co. |
| 63 | Annexure | LX | Chapter | XVIII | ... | Preliminary report of Vidhana Soudha Enquiry Committee to Government. |
| 64 | Annexure | LXI | Chapter | XVIII | ... | Letter No. P.W.B. 4386/1, dated 25th August 1956 from the P.W. Secretary to the Secretary, V.S. Enquiry Committee, conveying orders of Government on the interim report of the V.S. Enquiry Committee. |
| 65 | Annexure | LXII | Chapter | XVIII | ... | Statement of possible economies, with proper planning. |

# VOLUME III

*Annexures*

## PROBABLE ESTIMATE FOR THE CONSTRUCTION OF THE HOUSES OF LEGISLATURE—BOTH STAGES.

1. Plinth area of first stage. ... 78,400 sft.

Estimated cost for the first stage construction; Building portion only Rs. 16,05,000.

Cost per sft. ... Rs. 20·75.

2. Details for second stage construction.

| | *Ground floor.* | *First floor.* |
|---|---|---|
| (*a*) Auditorium ... ... | 4,000 sft. | Nil |
| (*b*) Lounges and Visitors' rooms ... | 3,900 sft. | 3,900 sft. |
| (*c*) President's and Secretaries' rooms... | 2,800 sft. | 2,800 sft. |
| (*d*) Corridor and passage ... | 7,000 sft. | 7,000 sft. |
| | 17,700 sft. | 13,700 sft. |

Total ... 31,400 sft.

Cost for construction of second stage of 31,400 sft., based on the rate of Rs. 20·75 per sft. of construction of first stage ... 6·43 lakhs.

| | | Rs. |
|---|---|---|
| Add for | (i) Providing electric lights—L.S. ... | 1,00,000 |
| | (ii) Water Supply and Sanitary Fittings—L.S. ... | 25,000 |
| | (iii) Overhead charges—prorata based on provision of 1·6 lakhs for the first stage construction $\frac{6·43}{16·05} \times 1·6$ ... ... | 60,000 |
| | (iv) Providing furniture—L.S. ... ... | 1,00,000 |
| | Total ... | 9,28,000 |

## ABSTRACT.

| | Rs. |
|---|---|
| Cost of construction of first stage as per estimate, inclusive of service. etc., complete ... | 23,64,000 |
| Cost of construction of second stage as per estimate, inclusive of service, etc., complete ... | 9,28,000 |
| Miscellaneous and unforeseen ... ... | 8,000 |
| Total ... | 33 lakhs |

CHAPTER III—ANNEXURE II.

## VIDHANA SOUDHA ENQUIRY COMMITTEE

### Instructions of the Chief Minister with reference to changes and additions within the structure.

| Sl. No. | Date of inspection | Description of work | Corresponding item in estimate |
|---|---|---|---|
| 1 | 23rd October 1953 | The plan for the III floor may be finalished by the Government Architect and got approved and arrangements made to secure materials. | ... |
| 2 | 9th November 1953 | In view of the construction of the III floor, the height of the dome may be increased after examining this aspect. | ... |
| 3 | 28th January 1954 | The difference in level in the southern quadrangle may be taken advantage of for the accommodation of about 500 cycles underground, and roof over the floor may be completed with concrete, to provide accommodation for members to take rest. | ... |
| 4 | 10th April 1954 .. | The staircase rooms on the eastern and western sides are spacious and fit for offices. They may be kept free, and staircases arranged around the lift rooms or inside the entrance halls in convenient places. | ... |
| 5 | 21st March 1955 .. | The colour treatment for the carpet tiles in the verandah may be changed. Grey colour tiles with border may be adopted. Different designs may be adopted symmetrically from the centre towards the ends on all the four sides of the building. | ... |
| 6 | 13th June 1955 .. | The several offices to be located in Vidhana Soudha may be provided with new furniture manufactured at site. Furniture from buildings like the Secretariat, New Public Offices, etc., need not be transferred to Vidhana Soudha, but may be made available either to the offices which are going to occupy those buildings or to other offices in mofussil places, which are badly in need of furniture. | ... |
| 7 | 7—8th October 1955 | The Central Hall and the party room on the northern side has insufficient ventilation. This may be raised by about 2' over the general roof level, ventilators and chajjas may be provided as done for Cabinet and Chief Secretary's Chambers. The hall above party room on the northern side will be used as Conference Hall. The beams may be cast as inverted beams so that the clear height of the room may be improved, and there may be a plain roof inside without beams. The ceiling may be finished with simple designs. | ... |
| 8 | 30th November 1955 | Up-to-date bath tubs, with water spray and hot water and other sanitary fittings may be provided in the ante-room of Chief Minister's Chambers. | (4 of abstract estimate) |
| | | The main dome height may be reduced by 15' by adjusting the design suitably. | |
| | | The secondary dome heights may also be reduced to the extent permissible after accommodating lift machinery in the dome space. | |
| 9 | 20th December 1955 | The southern face of north wing—The railing in all the three floors may be finished with R.C.C. fret work with different designs. | 27 |
| 10 | 31st December 1955 | The pediment by the side of wall above western portico is too high; the same may be reduced suitably. | 33(b)3 |
| 11 | 3rd January 1956 ... | In view of the fact that orders have been placed for metallic louvred fluorescent fittings for the false ceiling portion of Vidhana Soudha, the same may be retained and fixed up. | ... |
| 12 | 11th February 1956 | The garage may be extended beyond the building line, as far as levels permit and the number of garages increased. | (2 of abstract estimate.) |
| 13 | 13th February 1956 | Collapsible gates may be provided at the junction of central facades to prevent the stream of visitors disturbing the offices. | |
| | | The finials, over the end domes may be constructed with hollow cement-concrete and finished with mosaic of suitable colour for sample; another sample may be put up with the finial painted over with gold paint. | 33(b) |
| | | Ante-room of Cabinet, may be divided into closet, bath, dining and rest apartments, and all amenities including hot water may be provided. | (4 of abstract estimate.) |
| 14 | 9th May 1956 ... | The corner stone pilaster by the side of the corner domes, hides the profile of corner domes; the last pilaster may be removed and flat treatment given to prevent fouling the profile of the corner domes. | 28 |
| 15 | 19th/21st May 1956 | The doors provided in the eastern entrance into Assembly Hall are not proportionate. The heights and widths may be adjusted and made more proportionate. | 16(3) |
| | | The stone pilasters by the side of southern facade top pediment are fouling the side view of the railing. The same may be removed and used elsewhere. | 33(b)3 |
| | | The western side doors of Assembly Hall are too narrow; outer doors may be removed and passage widened, and architraves provided with mosaic finish; inner door may be removed and widened and imposing door may be put up, either by veneering planks or by solid frames | 164(c) 16 |

# VIDHANA SOUDHA ENQUIRY COMMITTEE

## Instructions of the Chief Minister with reference to changes, additions, etc., outside the Structure.

| Sl. No. | Date of inspection | Description of work | Remarks |
|---|---|---|---|
| 1 | 7th January 1954 ... | Three to four ornamental fountains of the type in the Zoological Gardens, Mysore, may be provided in front of Vidhana Soudha. | |
| 2 | 10th April 1954 ... | Clearing earth around the building may be arranged with earth moving machinery, during nights on moonlight days. | |
| 3 | 26th May 1954 .. | The road in front of Accountant General's Office may be finished with cement concrete. This may be included in the Accountant General's Office building estimate. | |
| 4 | 8th December 1954 .. | Wooden seatings may be provided for visitors in the Verandahs of all the end facades in all the floors. | |
| 5 | 5—7th October 1955 .. | The area between the Vidhana Veedhi and Vidhana Soudha may be formed into terraces with suitable approaches and the entire area laid out with lawn and flower beds. Ornamental fountains are not necessary in this area.<br>Ornamental fountains may be provided in the bouleward in the centre of Vidhana Veedhi at intervals. Lawn and flower beds may be arranged alternatively.<br>Two ground tanks may be constructed opposite the dome to reflect the view of the building.<br>Two large fountains may be provided, one at the circle near Government Press, the other at the circle in the Cubbon Road. This may be illuminated and may be of the same type as adopted in Delhi. | |
| 6 | 21st October 1955 ... | The fountain and flower beds may be arranged alternately for the bouleward portion of Vidhana Veedhi.<br>The valley to east of Sudershana may be made into suitable terraces and converted into park.<br>Green fencing by the side of Residency Park Road and park layout in this area may be started. | |
| 7 | 30th November 1955 | Furniture for Chief Minister and other Ministers may be prepared with the best design selected from the best furniture manufacturers in Bangalore. | |
| 8 | 20th December 1955... | Lamp post designs for Vidhana Veedhi may be made of R.C.C. with more artistic designs and fixed alternately at the interval between fountains in the bouleward of Vidhana Veedhi. | |
| 9 | 8th February 1956 ... | Pipe scaffolding may be secured to facilitate repair works to avoid scaffolding. | |
| 10 | 9th May 1956 .. | The Residency Park road near Government Press may be widened by 20′ towards the south, as the motor traffic is heavy. | |
| 11 | 21st July 1956 ... | The ground tank work in front of main steps may be started and completed early.<br>The newly filled up area between Sudershana building and Government Press may be converted into parking place for cars.<br>The traffic island under construction in front of Accountant General's Office looks too large. The same may be reduced to 30 feet dia.<br>High ornamental steel railing may be provided over parapet all round the circle in front of Accountant General's Office. | |
| 12 | 1st August 1956 .. | Nitches with seats may be provided near the circle to the East of Accountant General's Office, for convenience of public.<br>The lawn area that is now being formed in front of Atara Kacheri should be absolutely level, without depressions. | |

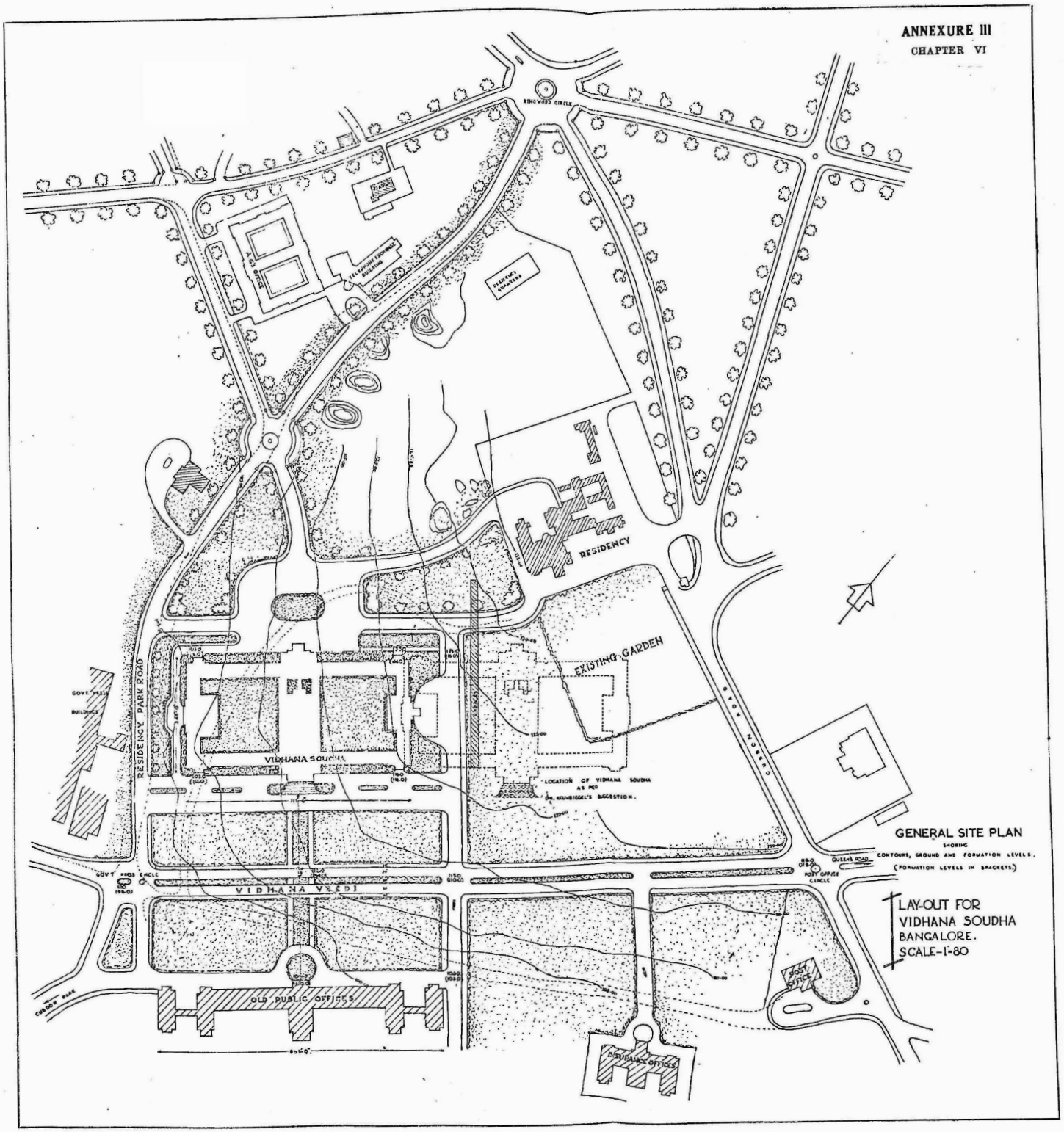
# VIDHANA SOUDHA ENQUIRY COMMITTEE.

## Instructions of the Chief Minister with reference to the Special Architectural Features.

| Sl. No. | Date of Inspection | Description of work | Corresponding item in estimate |
|---|---|---|---|
| 1 | 21st October 1953 ... | The pillars in the ground floor of Assembly Hall in Verandah may be finished with mosaic, with good designs, to be copied from Palace. | ... |
| | | The wall inside the verandah may be finished with mosaic upto 3 ft. height, with a good designed border. | ... |
| 2 | 23rd October 1953 ... | Pillars inside Dining Hall below the Assembly Hall, may be finished artistically, by adopting approved designs. | ... |
| 3 | 9th November 1953 ... | The staircase in front of the Assembly Hall may be designed in the form of a Kamala, as per sketch enclosed. The plan and elevation of the steps may be prepared and shown to the Hon'ble Chief Minister. | 37 (a) |
| 4 | 13th January 1954 ... | The design prepared for lintel slab of window towards the inner quadrangle is approved with the modification that the battlements (kotethene) of the parapet may be made like a leaf with the top lip slightly leaning forward. The parapet treatment at the top may be varied from place to place to avoid monotony. | 20 (a, b, c) |
| 5 | 28th January 1954 .. | The window lintel treatment adopted for 'Kumara Krupa' building towards East may be adopted for southern quadrangle in the ground floor, where the masonry is not yet built up to lintel level. The window balcony treatment adopted at Kumara Krupa towards North, with side pillar-treatment may be adopted for the II and III floors, towards the quadrangle with suitable modifications, wherever necessary. | 20 |
| 6 | 26th May 1954 ... | Inscriptions with big size bold letters may be carved alround the building on the vertical slab in the entemblature portions. | 63 |
| | | In the front main steps, Basavannas may be provided instead of elephants. | 37 (a) |
| 7 | 26th September 1954. | The design of the pillars in the Palace, "Amba Vilas Hall" together with the details of decorations made on the arch joining two pillars, may be adopted with suitable modifications, for the pillars in the Dining Hall. | 31 (b) 1 |
| 8 | 5/7th October 1955 ... | The decorations for pillars and beams in the Dining Hall should be simple and elegant. | 31 (b) 1-d |
| | | Panel in front steps: Embossing may be in stone, as under: Left inside as we face the building, rear (i) Wild elephants view in jungle, (ii) Southern side, Khedda operation with blockades, (iii) Front side, tamed elephants with mahuts and howdah, (iv) Right side rear-sheep, (v) Northern side bullocks with cart, (vi) Front-ploughman with plough with bullocks. | 37 (a) |
| | | The sample parapet pilasters of the square pyramid shape top finial may be adopted for parapet pillars on the south-west, and north sides, except on the eastern side. | 28 |
| | | Different panel designs on the parapet pilasters may be adopted for different directions of building. The finials also may be of different patterns accordingly. | 28 |
| | | The walls of the Conference Hall be provided with suitable art treatment to befit the purpose of the hall. | 61 (b) |
| | | The top parapet Kotethene towards east may be 5 feet in height and proportionately wide. This may be only three pieces between two pilasters. The pilasters may be avoided and some other suitable design with flower may be introduced. | 28 |
| | | The kotethene on the southern side is too plain; carving may be done in the same manner as is done at Subramanya Swamy Temple. | 28 |
| 9 | 21st October 1955 ... | The ceiling flower design in the Foyar Hall and the ceiling flower design in south-west facade should be enclosed with plain border 3"—4" wide. | 30 (g) |
| | | The Prabhavalies proposed on the four sides of domes may be completed as indicated in drawing and they need not rest on the capotha chajja. | 33 (b) |
| 10 | 9th November 1955... | The circular pillars at the entrance in Dining Hall in the East foyar Hall are too slender. These may be finished with step desing as has been done at Mysore Palace. | 31 (b) 1 a |
| 11 | 30th November 1955... | The four pillars in the first floor of the western vestibule may be finished with wood with large carved bases and capitals as is done in the Palace. | 31 (b) 2 (c). |
| | 30th November 1955... | The flat ceiling in the Dining Hall may be made with curved shape and designs provided. | 36 (b) |
| | | The entrance into the Council Hall may be provided with ornamental wooden door sufficiently wide and high, of the type of Temple Mahadwara. | 16 |

| Sl. No. | Date of Inspection | Description of work | Corresponding item in estimate |
|---|---|---|---|
| 12 | 20th December 1955... | Stone balustrades for north portico. The total height of the railing may be limited to 4'—2". | 27 |
| 13 | 31st December 1955... | The finial on the ridge of the Council Hall may be made of hollow R.C.C. and fixed. | |
| | | Cluster lights may be provided instead of lay lights below the curved ceiling in the Dining Hall. The four slender pillars at the eastern entrance to Dining Hall may be finished as per designs shown in the screen in the staging at the Central College. | 31 (b) & 3 of abstract Estimate. 1 (a) |
| | | The circular pillars in the front foyar hall may be finished with No. 2 design selected in the dias at Central College | |
| | | All doors and windows on the eastern side in all the floors should be provided with architraves in mortar. | 64 (c) |
| 14 | 31st January 1956 ... | The Vidhana Soudha building may be lighted with ornamental colour lights so that the profile of domes may be clearly viewed during nights. | (3 of abstract estimate). |
| | | The wooden skirting in the Cabinet Room may be projected beyond the wall to enable arranging of books over the projected portion. | |
| | | The Conference Hall ceiling may be finished with a smooth gentle curve and painted with designs. | |
| | | The marble fountain from Messrs. Abdul Gani Abdul Hakim & Co., may be secured and fixed in the front foyar hall suitably. | |
| | | The saying "Government work is God's work" may be carved with large size letters on the entemblature slab over the Eastern entrance over the grand staircase. The same may be fixed with Neon lights also in order that the same could be read during nights. | ... |
| | | Bharathanatya in several poses may be carved in granite stones, about 20 different designs, and fixed all over the park in different places. | ... |
| 15 | 11th February 1956 | Sample railing for III floor, as put up on the eastern side may be adopted with the modification that flower designs may be adopted in the centre and square panels on either side. | ... |
| | | Natural scenes, like forest scenes with wild beasts, may be embossed on the beams in the foyar hall of ground floor. | ... |
| | | Over the large main and cross beams of the front foyar hall in ground floor, scene depicting procession of Congress volunteers marching with National Flags may be put in. | 30 (e) |
| | | Dining Hall flooring may be finished with plain light buff colour tiles, without designs. | 48 |
| | | Elephant model at ends of the main steps on the East may be put up in standing pose of the elephant. | 37 (a) |
| | | The diameter of base and capital of columns in between the toilets in ground floor front foyar may be increased by 4". | 31 (b) 1 (b) |
| 16 | 13th February 1955 | The flower rings provided in the front facade over beams may be connected centrally, as if they are continuous. | 30 (e) |
| | | The circular staircase inside the main dome may be finished as if a flower garland is hung up, to avoid ugly projection inside the dome space. | 43 & 30 (e) |
| | | The pillars in the western facade may be finished with design of pillars as at Bhoginandiswara Temple at Nandi. | 31 (b) 2 |
| 17 | 3rd March 1956 ... | Features as roof panel treatment, beam treatment, cornice, sikaras by the side of main gopuram, etc., of Somanathpur Temple may be adopted wherever they fit in. | ... |
| 18 | 19th May 1956 ... 21st May 1956 ... | Replacing the painting originally proposed for the Assembly Hall panels by one plough man with plough and bullocks, and another industrial scene, may be examined as they represent main subjects of national development. | ... |
| | | Garments worn by women in different parts of Mysore State vary in custom and fashion; good photos of the same may be obtained and represented by paintings. | ... |
| | | The capitals of circular pillars in the western foyar hall may be improved by providing petals. | 31 (b) 2 |
| | | The capitals as provided in the Drama Scenes of Lakshmi Theatre, may be copied for circular pillars in the western vestibule. | |
| | | The arch provided in the inner scene of the above theatre may be copied and provided for several nitches made for statues in the eastern foyer hall. | |
| | | The Council Hall main entrance on the eastern side should be made more imposing and prominent. | 64 (b) |
| 19 | 21st July 1956 ... | Stone petals over capota chajja over balconies, may be polished, to obtain colour effect, as they are not visible clearly over dressed stone wall background. | 58 (b) |

**ANNEXURE III**
CHAPTER VI



ANNEXURE IV

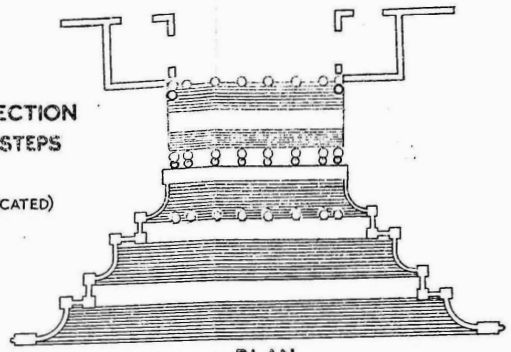
CHAPTER VI

# VIDHANA SOUDHA

## FRONT ELEVATION PLAN & SECTION WITH PORTICO & COVERED STEPS

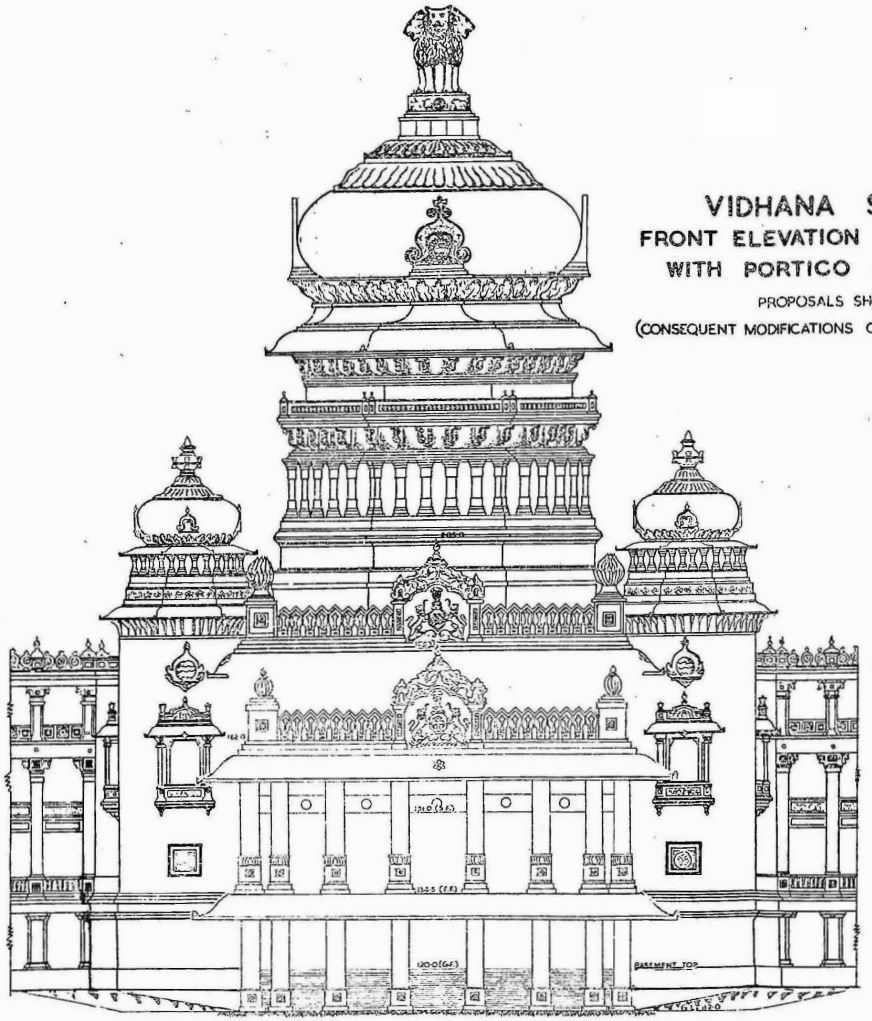
PROPOSALS SHOWN IN RED

(CONSEQUENT MODIFICATIONS OF DOME NOT INDICATED)

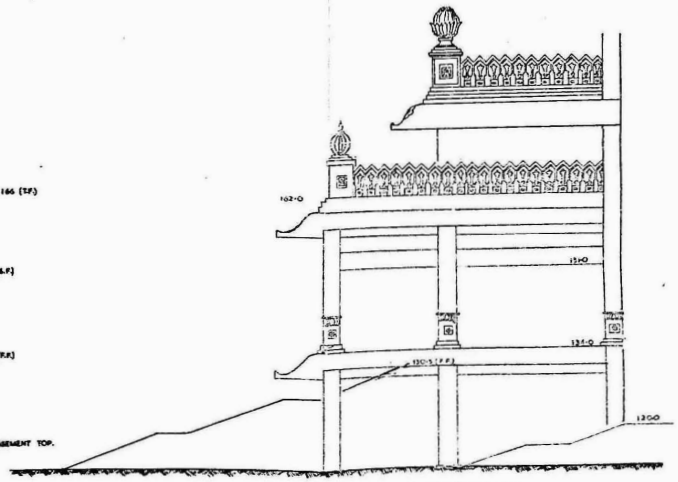


PLAN

SCALE 16 8 0 16 32 FEET




ELEVATION




SECTION

SCALE 8 6 4 2 0 8 16 24 32 40 FEET

NOTE ON THE DATAS OF CERTAIN ITEMS OF WORKS.

*Datas in the Estimate for Rs. 130 Lakhs.*

Except for a few items, the estimate for Rs. 130 lakhs contains mostly non-scheduled items, necessitating the preparation of datas for each one of them. The estimate for Rs. 50 lakhs originally sanctioned administratively, which was superseded by the detailed estimate for Rs. 130 lakhs subsequently sanctioned, had provided for rates which were not only arbitrary but were also unworkable.

The rates for the non-scheduled items in the estimate for Rs. 130 lakhs, were stated to have been based on actual data, at the time when the detailed estimate was got up and submitted for sanction, as works had by then sufficiently advanced; but some of these datas, are seen to be not faithful, owing to certain fallacies, to be elaborated. Also, owing to either changeover in further specifications or to fluctuations in the market or due to other causes, the rates actually realised in some cases are more than the provision in the sanctioned estimate.

The datas for the stone dressing work have been based on the number of chiseler-days. Further, as a large number of chiselers had been recruited from mofussil places, higher rates had to be paid to keep them working. In fact the Chief Engineer, had on the recommendations of the Special Engineer, passed 10% higher rates for dressing work and the chiselers were paid more than their normal wages.

In such circumstances, the datas for such stone dressing works, must have been considerably exaggerated, and they are not susceptible of any correct scrutiny. There has also been wasteful expenditure generally on stone dressing work, owing to unnecessary re-dressing resorted to over the normal dressing of pillars *vide* evidence paras 19 and 21 of witness No. 3.

**Scrutiny of datas accompanying the Estimate for Rs 130 Lakhs.**

Barring the items of work, for which the specifications were changed during the course of construction, it is seen that even for standard items, the basis for the datas was inconsistent and incorrect, resulting generally in larger provisions (Appendix I).

No datas had been prepared for wood work of different kinds, and the flooring items, except for the warehouse or granolithic types, done by the department were coverd by the tender rates.

Out of the other datas made available, a few relating to the major items have been selected and scrutinised. Columns 5 and 6 of Appendix I, detail the rates provided in the Rs. 130 lakhs estimate, stated to have been based on datas and the rates arrived at after scrutiny, respectively.

The rates actually worked out have been higher in some cases, according to the details made available in the workslips.

**General Observations.**

The following remarks relate to some of the datas, stated to have been got up as per actuals and incorporated in the estimate for Rs. 130 lakhs.

(i) Instead of basing the data scrupulously on the actuals, lumpsum provisions have been made for petty supervision and Tools and Plant charges in the data, (*a*) prepared by the Central Section. Also, a lump-sum provision against the head 'Unforseen' has been made (*b*) for certain items.

(ii) Scaffolding charges, wherever incurred have been considered in *toto* (*c*) instead of being *prorata* and after accommodating for the released value.

(iii) In arriving at the datas, there has been no uniformity in the North, South and Central Sections, in the assumption of the cost for materials and rates for labour. (*d*) For example, the rate for cement adopted has varied from Rs. 4-12-0 to Rs. 5 per bag, the cost of steel from Rs. 21 to Rs. 26 per cwt and the labour from Rs. 3 to Rs. 3-4-0 per mason.

(iv) Ordinary dressing as two or three lines, and palmane dressing for stones have been largely resorted to, and the basic rates for one, two and three line dressings (6 as. per s.ft, 12 as. per s.ft. and Rs. 1-2-0 per s.ft. respectively) prior to the palmane finish, adopted for deriving the ultimate cost for the unit of work, are invariably more than the schedule rates of as. 5 per s.ft. as. 8 per s.ft. and 10 as. per s.ft. respectively prevalent for the year at Bangalore *vide* sanctioned schedule of rates of Buildings Division, Bangalore, which schedule has been adopted for the Vidhana Soudha Division also.

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(a) Items 4 (b)—6 (a)—6 (d)—6 (e) & 7 of the estimate.

(b) Item 31 (B)—1 (e) of the estimate.

(c) Items 12 (e)—25 and 42 (a) of the estimate.

(d) Items 3-4 (b),—6 (a)—6 (e)—13-22 and 24 of estimate

(v) In the case of palmane work done either over two line dressed or three line dressed works, the rates as one could expect, should be more in the first case than in the other. But it is not uniform. In certain cases (*a*) a rate of as. 6 per s.ft. for palmane work over three line dressing has been considered. In other cases, (*b*) a rate of as. 12 per s.ft. for palmane finish over three line dressing has been considered.

(vi) Work being almost similar, only two line dressing has been considered in some cases (c) and palmane finish over two line dressing, in other cases (*d*) Again, works being similar, two line dressing and palmane finish, has been considered in some cases, while three line dressing and palmane finish have been considered in other cases (*f*).

(vii) In the case of dressing of joints, a rate of as. 3 per s.ft. has been considered in some cases (*g*) and a rate of as. 6 per.s.ft in other cases (*h*).

The rates for unit works actually worked out by the staff in charge and recommended by the Assistant Engineers for approval of the Special Engineer, have been summarily cut down by the Special Engineer in almost all the items, which disputes the very sanctity of the data, *vide* appendix II.

(viii) Certain arbitrary assumptions, as (A) an increase of Rs. 30 per square (*i*) for every one inch increase in thickness over 6″ roof slabs, against the provision of Rs. 22-8-0 per inch increase, *vide* schedule of rates, sanctioned for the year 1955-56 of the Buildings Division, Bangalore and adopted for Vidhana Soudha Division, (B) an increase of Rs. 5 per square of R.C.C. roof slab for each of the higher floors (*j*), (C) addition of Re. 1 per cft. for every 1 % increase in reinforcement (*k*) and (D) as. 2 extra per c.ft. for lift charges for each floor (*l*) have been made.

It is seen that there are still about 580 data sheets under various stages of disposal, only 22 so far having been disposed off by the Chief Engineer (Appendix III).

Thus the purpose for which these data sheets were intended *viz.*, being a guide for the execution in controlling rates and for the audit staff for scrutiny has not been served.

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(a) Dressing datas 42, 43, 59, 240 & 354
(b) datas 45, 46, 48, 138 & 219
(c) datas 96, 97, 136 & 137
(d) datas 138 and 171
(e) datas 7, 86, 39, 214 & 218
(f) datas 37, 38, 40, 54, 212, 215
(g) datas 98, 102, 103, 123, 150, 153,
(h) datas 47, 51 143, 156
(i) Items 22 and 22 (c) of estimate.
(j) Items 22 c of estimate
(k) Item 24 (c) of estimate
(l) Item 24 (h) of estimate

## APPENDIX I

Statement showing Rates for certain Items of Works, as per Estimates, and as per Data

| No. | Item of work | Unit | Rate | | | | Remarks |
|---|---|---|---|---|---|---|---|
| | | | As provided in Rs. 50 lakhs estimate | As provided in Rs. 130 lakhs estimate stated to have been based on data | As per scrutiny of datas in column 5 | As per schedule rate for 1955-56 (V.S. Dn.) | |
| 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 |
| 1 | R.C.C. raft for foundation with 1 per cent steel. | C.ft. | Rs. a. p.<br>1 8 0 | Rs. a. p.<br>3 0 0 | Rs. a. p.<br>2 14 0 | Rs. a. p.<br>... | (i) Arbitrary provision in Rs. 50 lakhs estimate.<br>(ii) Extra 15 per cent steel is considered for wastage, laps and hooks.<br>(iii) In addition to usual barbending and fabrication charges, extra labour charge of annas 12 per cwt. considered for conveying bars, straightening, etc. |
| 2 | Size stone masonry for foundation in 1 : 6 cement mortar. | C.ft. | 1 2 0 | 1 2 0 | 1 2 0 | 0 15 3 | The schedule rate (Col. 7.) is for 1954-55 and provides for 6″ courses as against 8″ to 9″ courses provided in 130 lakhs estimate. |
| 3 | R.C.C. T. beam with 3 to 5 per cent steel. | C.ft. | *5 0 0<br>(with plastering complete). | 7 12 0<br>(without plastering and finish). | 7 8 0<br>(without plastering and finish). | †6 6 0<br>(with plastering complete). | Extra rate provided in estimate is due to additional provision of steel for wastage, and for additional labour charges for conveying bars, straightening, etc.<br>*Percentage of steel not specified.<br>†3 to 4½ per cent steel considered. |
| 4 | Wire cut bricks in cement mortar 1 : 6 for partition walls with reinforcements. | C.ft. | 1 2 0<br>(without reinforcement and without plaster). | 3 5 0 | 3 0 0 | 2 0 0<br>(without reinforcements and without plaster). | The excess in rate is due to extra quantity of cement and sand considered both for construction and plastering, and extra quantity of steel for reinforcement. The number of bricks considered per unit work is however less than necessary. |
| 5 | Pointing to size stone masonry with cement mortar 1 : 3. | Sq. | 8 0 0 | 12 0 0 | 10 4 0<br>(Data for the item has not been made available. The provision is more and the cost as per actual work is very high). | 6 8 0 | Rate as per workslip Rs. 16. |

**Appendix I—(*concld*).**

Statement showing Rates for certain Items of Works, as per Estimates, and as per Data.

| No. | Item of work | Unit | Rate | | | | Remarks |
|---|---|---|---|---|---|---|---|
| | | | As provided in Rs. 50 lakhs estimate | As provided in Rs. 130 lakhs estimate stated to have been based on data | As per scrutiny of datas in column 5 | As per schedule rate for 1955-56 | |
| 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 |
| 6 | Plastering with cement mortar $\frac{3}{4}$″ to $1\frac{1}{4}$″ thick with lime rendering in 3 coats. | Sq. | Rs. a. p.<br>9 0 0<br>(lime plaster) | Rs. a. p.<br>22 0 0 | Rs. a p.<br>22 0 0 | Rs. a p.<br>15 0 0 | The schedule provides for only one coat of $\frac{3}{4}$″ thick cement plaster (1 : 3) with lime rendering. |
| 7 | Skirting ... | R.ft. | (not provided) | 2 0 0<br>(with tiles 10″ high). | 1 4 0 | 0 12 0<br>(9″ high-plain). | Rate perhaps based on tender data is not furnished. |
| 8 | R.C.C. cols. 1 : 1 : 2 with 3 to $4\frac{1}{2}$ per cent steel vibrated concrete. | R.ft. | 5 8 0<br>(1:2:4 concrete ; reinforcements not specified). | 8 8 0 | 8 8 0 | ... | |
| 9 | Teak wood doors $3\frac{1}{2}$″ × 5″ frame $1\frac{1}{2}$″ thick shutters $\frac{1}{3}$ panelled, and $\frac{2}{3}$ glazed, etc. | S.ft. | 7 0 0 | 9 0 0 | 8 8 0<br>(inclusive of wooden cornice alround). | 9 0 0 | |
| 10 | Teak wood windows 3″ × 5″ frame glazed shutters, etc. | S.ft. | 6 0 0 | 8 0 0 | 7 11 0<br>(3″ × 4″ frame inclusive of wooden cornice alround). | 6 2 0 | |
| 11 | R.C.C. roofing 1 : 2 : 4, 6″ thick ... | Sq. | 180 0 0<br>(inclusive of ceiling plaster). | 190 0 0<br>(without plaster) | 180 0 0<br>(without plastering, etc.). | 190 0 0<br>[inclusive of plastering, flooring, coving etc., costing Rs. 40 Sq. (150).] | Excess in rate is due to additional steel for wastage and for end fixity. |
| 12 | Flooring with 3″ thick granite slab three line dressed laid diagonally over a bed of 3″ lime concrete and pointed. | Sq. | 120 0 0 | 165 0 0<br>(with bed of $4\frac{1}{2}$″ thick 1:4:8 cement concrete).<br>115 0 0<br>(without bed concrete). | 229 2 0<br>(with bed of $4\frac{1}{2}$″ (1:4:8) cement concrete and Rs. 189 without bed concrete). | 113 0 0<br>(bed of 3″ lime concrete). | Rate shown in workslip is Rs. 275 without bed concrete and Rs. 325 with bed concrete.<br>Under—provision in estimate, but worked rate very high. |

## APPENDIX 2

Statement showing the rates approved by the Special Engineer against the rates arrived at on Datas by the Assistant Engineers for certain items of works.

| Sl. No. | Data No. | Item | Rate as recommended by Assistant Engineer | Rate as approved by Special Engineer | Remarks |
|---|---|---|---|---|---|
| | | | Rs. a. p. | Rs. a. p. | |
| 1 | 50 | Lintels and cills for ventilator opening ... | 7 2 0 | 3 9 0 | Reduction in pulmani charges. |
| 2 | 42 | III floor entemblature slab ... | 41 6 0 | 34 13 0 | |
| 3 | 94 | Pillars for windows ... | 11 4 0 | 8 0 0 | |
| 4 | 166 | Freize slab with carving ... | 132 2 3 | 116 0 0 | |
| 5 | 171 | Balcony cill slab ... | 58 6 0 | 37 5 0 | |
| 6 | 177 | Dressing corner Joints of flower stones ... | 15 0 0 | 7 8 0 | |
| 7 | 183 | Prabhavali piece No. 6 ... | 125 4 3 | 99 13 0 | |
| 8 | 184 | Do No. 7 .. | 102 3 6 | 78 12 0 | |
| 9 | 185 | Do No. 8 ... | 142 11 9 | 110 4 0 | |
| 10 | 186 | Flower stones of dome ... | 145 2 0 | 116 6 0 | |
| 11 | 326 | Flower panel of N. portico parapet ... | 172 0 0 | 120 5 0 | |
| 12 | 303 | Chaitya top piece ... | 185 3 0 | 140 3 0 | |
| 13 | 365 | Pediment for parapet over kapota ... | 90 15 0 | 62 4 0 | |
| 14 | 366 | Do ... | 184 10 6 | 121 13 6 | |

## APPENDIX 3

Statement of data sheets for Stone Dressing in Vidhana Soudha Division.

| Sl. No. | Preparation of data sheets | | Submission to Chief Engineer | | Approved by the Chief Engineer | | Returned by the Chief Engineer | | Resubmitted to Chief Engineer | |
|---|---|---|---|---|---|---|---|---|---|---|
| | Period | No. | Date | No. | Date | No. | Date | No. | Date | No. |
| 1 | 8/54 | 15 | 8/54 | 15 | 2/55 | 15 | | | | |
| 2 | 7/55 | 7 | 10/55 | 7 | 3/56 | 7 | | | | |
| 3 | 2/54 | 5 | 5/56 | 80 | ... | | 8/56 | 38 | The data file along with all the datas are sent to the Committee and is being awaited for further action. | |
| | 12/55 | 30 | | | | | | | | |
| | 6/55 | 45 | | | | | | | | |
| 4 | 2/54 | 30 | 7/56 | 50 | ... | | 9/56 | 55 | | |
| | 6/54 | 20 | | | | | 10/56 | 37 | | |
| | Total | 152 | | 152 | | 22 | | 130 | | |
| 5 | Under submission | 451 | | | | | | | | |
| | Grand total | 603 | | | | | | | | |

(Sd.) M. Muniappa,
*Special Engineer*,
(Houses of Legislature) Vidhana
Soudha Division, Bangalore. (8—11—56)

## NOTE ON DESIGNS

### 1. General :

As in the case of detailed specifications necessary to work out the cost per unit of work, to be based on act al data, definite conditions of loading in addition to the kind of material to be used, and the purpose to which the part of the structure is intended for, are all necessary in formulating the designs for the different members that go to form the structure.

It would therefore be necessary to spend considerable time, to work out alternate designs, when once the final plans and sections of the structure are decided, commensurate with the specifications and purpose, with a view to obtain the most economical design with the necessary factor of safety and at the same time quite precise, based on the modern techniques and practice.

The working out of such designs for adoption, should follow the general building drawings, and the detailed working drawings for each member of the structure, giving out the details of design, to be completed well in advance of the commencement of the structure proper, will be very conducive to work.

In case however such a procedure has not been possible, owing to rush of work, and other exigencies of circumstances, in a large work generally, a separate section to go into this question, of working out designs and the connected drawings and with an authority approving and ordering the adoption of the same, is quite necessary.

### 2. Design for Vidhana Soudha

The construction of the Vinhana Soudha, estimated to cost nearly 1.5 crores of rupees, will have to be considered as a major scheme. Although the work has been rushed through on emergent basis, when once it was commenced, sufficient time has been spent for evolving out of suitable elevations and plans, by the Government Architect, who has passed on to the Executive Officer, the indicative drawings but not the working drawings quite in advance.

The estimate got up by the Executive Officer, based on these drawings, is stated to have been prepared in detail and carefully. In the absence of definite designs for the structural members and detailed working drawings, it is seen that the estimate has been on assumptions of liberal sections, which have mostly been adopted in the execution.

Except in the case of a few items as the Domes, the stone pediments, the parapet walls, the porches etc., where final decisions about the details had not been arrived at, the design unit could have been constituted, even after the preparation of the estimate and the commencement of the work, to standardise the designs for the common structural members, towards uniformity, safety, precision and economy in particular. The periodical changes of certain architectural features and other embellishments would not have materially affected the design of these members, except rarely, where the calculations and designs could have been suitably modified.

It is disappointing to find that there has been no such separate entities to go into the details of design, either in the Special Engineer's Office or in the Chief Engineer's Office, and that there has also not been the authoritative approval accorded to the designs, and a direction for the approved design, for being adopted at different places. The lack of the above has resulted in the separate formulation of designs, with different assumptions, and without any uniform procedure, in three sections of work-South, North and Centre, which sections were meant only for facility of construction. Further, the officers in charge of their respective works, had considerable strain in pushing through the work at great speed, arranging for the materials, organising work etc., that they seem to have had very little time to levy their full attention to the aspect of Designs.

The designs have also been worked out in haste, and apart from the absence of co-ordination and authority for approval, or sanction, in addition to the different assumptions in hypothesis resorted to generally, even arithmetical check is seen to have not been possible in certain cases. The absence of a second scrutiny in the matter of designs, got up at the moment when the progress of work warranted the same, is definitely against achieving any economy, but is also a serious issue.

### 3. Scrutiny of certain Designs

Many of the design calculations for different members in the structure, as got up in the several sections, have not been made available. Even in case the entire details had been obtained, with the limited time before the Committee, it would not have been possible to go into the details of each one of them, and give the observations after scrutiny.

From out of the design calculations of a few items, which where obtained, selected items have been scrutinised with a view to indicate some of the fallacies, mentioned above, while designs for some items have been re-worked following the latest practice, to show how economies would have been possible.

### 4. Fallacies observed—(*A*) Defects in Hypothesis

*Dead load, live load and combined loads.* (*i*) *Towards the allowance for* Dead load, the Central wing adopts a lumpsum of 2½ cwts. per sft. for the weight of the R.C.C. slab, weather proof course on topmost floor, plaster and floor finish etc., while the North and Southern wings consider these separately. In the case of the North wing, no allowance has been made for the floor and plaster finishes.

(*ii*) Regarding the allowance for live load, the south wing adopts 80 lbs. per sft. for all floors, except the basement floor, while the North wing has adopted 100 lbs. per sft. for all floors, *vide* Design for Item (4), *vide* item of 'T' beams for office rooms. In the Central wing, no live load has been considered for the third floor top, and provision has been made at 120 lbs. per sft. in the design for the item of the dining hall slab and 100 lbs. per sft. in the case of the design of the slab and beam of the first floor roof of the front lobby.

The omission of the adoption of standard practice, *vide* pp. 117 and pp. 118 of Marryat's specifications, wherein the superimposed loads for different types of buildings, the minimum superimposed loads, and the reduction to be effected of superimposed loading in successive storeys, have all been given, is marked.

(*iii*) In the case of the design for the rectangular R.C.C. beam in front of stairs and lift room, in the northern block, a combined load of 190 lbs. per sft. has been assumed, which, however, is without basis and rather low.

(*iv*) The weight due to the weather proof course, has been assumed differently in the different sections. The calculations for the load on size stone masonry in the Southern and Northern wings are based on a load of 120 lbs./sft. for the weather proof course, while in the Central block, only 100 lbs./sft. has been assumed, while designing the R.C.C. rectangular beam.

(*v*) Owing to the variations in the live loads, and loads due to the floor finish, plaster etc., the total combined load has worked out differently, in the same section, *vide* calculations for the design of the slabs and beams of the first floor of the front lobby and those for the design of the dining hall slab. Similar variations are noticed in the designs for 'Tee beams, and roof slabs, in the Northern Section.

(*b*) *Variations in constant in Standard formula.* The standard formula adopted in the calculation of sections of R.C.C. members is based on equating the total bending moment to the moment of resistance of the section.

The bending moment depends upon the conditions and values of loading, as well as on the fixtures of the members. Inasmuch as different values both for dead and live loads have been considered as elaborated above, the conditions of fixture being the same, the bending moment valuel is naturally different.

The moment of resistance of a section is the moment of the couple, consisting of the tota tensile force in the steel reinforcement acting at the centre of gravity of the steel, and of the total compressive force in the concrete, acting at the centre of gravity of the compressive forces.

The total compression being equal to the total tension, we have the general equation for the moment of resistance, which is expressed as M. R. = $Q.b.d^2$ where Q will be a constant, depending upon the position of the neutral axis, which in turn depends upon the maximum allowable stresses in concrete and in steel, and the grade proportion etc., of the concrete.

It is interesting to find from a perusal of the calculations made available, that there has been no definite assumptions towards obtaining uniformity or economy of design. The bye-laws of the London County Council or the British Standard Code of practice or the New Code of Practice of the Government of India, could have been faithfully and consistently followed.

The value of 126 for Q has been taken in the calculations for (*i*) slabs and beams of the first floor roof of the front lobby and (*ii*) design of dining hall slab, in the central block, and for (*i*) the roof for verandah and records room and (*ii*) Tee Beam in record rooms in the southern block.

The value for Q, in the case of the design of the roof slab at the dome portion in the Northern block, has been taken as 127, while the value has been 128, in the same section, relating to the design calculations of the Tee beam for Party room, and rectangular beam in front of stairs and lift room.

In the case of the southern block, the value adopted of 179 in the design calculations for the two-way roof slab, would have been justified if the mix had been 1 : 2 : 4; the mix being 1 : 1 : 2, the value adopted should have been 186 even for ordinary quality of work. Again, in the case of the design for a simple rectangular beam, the value adopted in this section has been 172.

It is however surprising to find that the value for Q, has been as low as 96 in the design calculations for the R.C.C. rectangular beams in general offices in the topmost floor, which figure is now obsolete, with the higher values for working stresses both in compression and in tension, as per modern practice.

(*c*) *Variations in the values of working strengths.*—The maximum allowable stresses in concrete and in steel, as per modern practice are taken as 750 lbs. per sq. in. and 18,000 lbs. per sq. in. respectively, the modular ratio being 18.

In the design calculations of different structural members, in the several sections, it is seen that these values have not only not been adopted, but there has also been inconsistency in the values adopted.

In the case of the design for the dining hall slab, central block, the values for concrete and for steel are 750 and 13,000 respectively, the latter figure being very low. In the northern section, both values of 14,000 lbs. and 18,000 lbs. for steel, have been considered in the designs for the office room Tee beam and values of both 600 lbs. and 750 lbs. for concrete, in one and the same calculation at different stages, for the party room Tee beam.

Regarding the designs of the secondary beams in the Foyar Hall, the allowable working stress in concrete has been assumed as high as 950 lbs. per sq. in. and that in steel as 16,000 lbs. per sq. in.

(*d*) *Omission of Standard practice.*—Besides the several variations pointed above, which are not according to standard practice, the adoption of which has only resulted in non-uniformity, allowances for partitions have been totally omitted in the calculation of the dead loads. In the absence of the position and the nature of the partitions, not being definitely shown in the plans, as partitions had been intended across the large halls at a number of places, a uniformly distributed load at the rate of 20 lbs per sq. ft. of floor area, should have been provided for, as an allowance to cover partitions, *vide* pp. 116 and 117 of Marryat's specifications.

(*e*) *Adoption of Modern practice.*—Although elaborate calculations with the graphical method for determining support moments and the influence line method have been considered in the design calculations of certain members, which have however not been gone into in detail, it is surprising as to how the calculations for end or corner restraints, giving correction for Torsion, according to the theories of Marcus and Pigeud *vide* pp. 228 to 233 of Sri K. L. Rao's Book on "Calculation, Design and testing of Reinforced concrete", in the case of two-way reinforced slabs, of different thicknesses, largely adopted, have been missed.

The taking into account of this theory, which is an improvement over the Rankine Greshoff principle would have considerably resulted in economy.

(*f*) *Lack of arithmetic check.*—The hustling through of the design calculations, without there being a secondary check, has, in some cases resulted in arithmetical errors, too, which have gone unnoticed.

For instance, in the case of the load calculations on the front stair case and lift walls, the calculated roof load of 21·2 tons, has been totally missed while totalling. In another instance of design of a slab with two-way reinforcement, the derivation of the value of $r$ has been shown as 31, which should actually be 36. This has however been considered as a typographical error, in view of the fact that the percentage of steel of 0·41 as adopted, is correct.

## 5. Modified designs.

A few modified designs have been worked out, based on modern principles and adopting the standard formula of 126 $bd^2$ for the moment of resistance, and the permissible working strengths of 18,000 lbs. per sq. inch in steel, and of 750 lbs. per sq. in concrete and a modular ratio of 15.

To facilitate comparison, the designs have been worked out for (*i*) two-way reinforced slabs of 24′ x 18′ and of 30′ x 30′ sizes (*ii*) the R.C.C. raft foundation and (*iii*) 6″ roof slab, and (*iv*) Rectangular beam.

The details of these designs are given as Appendix I. The comparative statement, *vide* Appendix 3 gives the results for these items as per the design calculations of the Vidhana Soudha Division and as per modifications.

## Observations.

(*i*) There has been no co-ordination in the evolution of the designs for the several structural members, and no uniform procedure has been followed.

(*ii*) Designs have not been formulated in advance, due to lack of detailed working drawings, and definite ideas of loading and other conditions.

(*iii*) As in the case of the work progressing on rush-basis, the designs have also been hurried through, without bestowing the required thought on the hypothesis, the formula, modern practice, etc., that had to be taken into consideration. With such hustling, scrutiny by a second party to obviate arithmetical mistakes, if any, has also been not possible.

(*iv*) Modern practice with the latest values for the working strengths of concrete and of steel, has not been followed. The adoption of such practice, whatever may be the safety factor, decided to be allowed, owing to urgency and other short-comings in the execution of work, would have been conducive to economy.

(*v*) A separate section to attend exclusively to the Design Calculations, either in the Special Engineer's Office, or in the Chief Engineer's office should have been set up, in view of the large work involving several designs.

## APPENDIX I.

### (1) Design for a two-way Reinforced Slab (24′×18′).

Assuming the slab to be fixed on one side and continuous on all the other three sides, we have the equation for equal deflection.

*for both ends free—*

for uniform load—along $L_1$ .... Deflection $= \frac{5}{185} \frac{w_1 L_1^4}{EI}$.

along $L_2$ .... Deflection $= \frac{1}{185} \frac{w_2 L_2^4}{EI}$.

Where one end is fixed and other free—

$$E_u I_u = 5/384 \frac{w_1 l^4}{EI} = \frac{1}{185} \frac{w_2 L_2^4}{EI}.$$

$$925\ W_1 L_1^4 = 384\ W_2 L_2^4.$$

$L_1 = 24$ and $L_2 = 8$.

Substitution—$W_1 = \frac{384 \times 18 \times 18 \times 18 \times 18}{925 \times 24 \times 24 \times 24 \times 24} W_2$.

$$W_1 = \frac{245}{1850} W_2 \text{ or } \frac{245}{1850} \times \frac{49}{370} \times \frac{7}{53} W_2.$$

$$W_1 = \cdot 132\, w_2.$$

$$W_1 + W_2 = 250 \text{ lbs.}$$

*i.e.* $1 \cdot 30\ w_2 = 250$ lbs. $= W_2 = \frac{250}{113} \times 100 = 221.$

Therefore $w_1 = 250\text{-}221 = 29$.

BM on $L_2$.

For one end fixed and one end free—

$$M_2 = 9/128\ w_2 L^2.$$

$$= \frac{9}{128} \times 221 \times 18 \times 18 \times 12.$$

$$= \frac{221 \times 81 \times 2}{8} = \frac{1768}{\underline{17901 \times 27}}.$$

$$8$$

$$= \frac{483327}{8} = 60416 \text{ or } \underline{60500} \text{ in. lbs.}$$

$$M_1 = \frac{W_1 L_1^2}{8}.$$

both free— $= \frac{29 \times 24 \times 24 \times 12}{8} = 25{,}056$ or $25{,}100$ in. lbs.

If whole load is caused by $L_2$—

$$M_2 = \frac{250 \times 18 \times 18 \times 12}{8} \quad = 6750 \times 18$$
$$= 1{,}21{,}500 \text{ in. lbs.}$$

$$M_1 = 250 \times \frac{24 \times 24 \times 12}{8} = 2{,}16{,}000 \text{ in. lbs.}$$

*Applying marcus correction—*

$$c_1 = 1 - 5/6 \frac{M_1}{M_2}.$$

$$c_2 = 1 - 5/6 \frac{M_2}{M_1}.$$

Substituting—

$$c_1 = 1 - 5/6 \frac{25100}{121500} = \frac{201}{243}.$$

$$c_2 = 1 - 5/6 \frac{60{,}500}{2{,}16{,}000} = \frac{605}{2592} = \frac{1987}{2592}.$$

$$c_1 M_1 = \frac{210}{243} \times 25100 = 15{,}819 \text{ inch lbs.}$$

$$c_2M_2 = \frac{1987}{2592} \times 60500 = 60{,}240 \text{ inch lbs.}$$

$$d = \sqrt{\frac{60{,}240}{126 \times 12}} = \sqrt{39} = 6{\cdot}3 + 1{\cdot}20 \text{ cover} = 7{\cdot}5''.$$

$$As = \frac{60{,}240}{18000 \times {\cdot}87 \times 6{\cdot}3''} = 0{\cdot}6 \text{ sq. inch.}$$

5/8" dia. rods at 6" c/c.

for the longer span—

$$\frac{15{,}819}{18000 \times {\cdot}87 \times 6{\cdot}3} = 0{\cdot}17 \text{ sq. inch.}$$

use $\frac{1}{2}$" dia. rods at 12" c/c.

### (2) Design for two-way slab for 30′ × 30′.

A case where all the four ends are fixed :

| | | |
|---|---|---|
| Loads—Dead load | ... | 150 lbs. |
| Live load | ... | 100 lbs. |
| Floor concrete, Floor tiles, Plaster etc., | ... | 46 lbs. |
| | | 296 say 300 lbs. |

Ratio 30/30 = 1

R and G ; coefficient $\frac{L_2}{L_1} = 1$

$W_1 = W_2$ *i.e.* $W_1 = 150$ lbs.
$W_2 = 150$ lbs.

$$BM = \frac{wl^2}{8} = \frac{150 \times 30 \times 30 \times 12}{8} = 2{,}02{,}500 \text{ in lbs.}$$

If the whole load were taken by G or $L_2$

$$BM = \frac{300 \times 30 \times 30 \times 12}{8} = 4{,}05{,}000 \text{ in lbs.}$$

Applying marcus correction for end restraint—

$$M_1 = M_2 = \frac{7}{12} \times 2{,}02{,}500 = 1{,}18{,}125 \text{ in lbs.}$$

$$d = \sqrt{\frac{1{,}18{,}125}{18{,}000 \times {\cdot}87 \times 9}} = 0{\cdot}8 \text{ sq. inch.}$$

$\frac{3}{4}$" M.S. rods at $6\frac{1}{2}$" c/c.

### (3) Design of Raft Foundation for Heavily Loaded Wall.

*Considering a length of 10′ along the wall.*

(1) Weight of roof slab—

Office room side $4\ (1 \times 10 \times 13\frac{3}{4} \times \frac{1}{2} \times 150) = 41{,}250.$
Verandah side $4\ (1 \times 10 \times 6\frac{1}{4} \times \frac{1}{2} \times 150) = 18{,}750.$

(2) Weight of waterproof course—

Office room side $(1 \times 10 \times 13\frac{3}{4} \times \frac{1}{3} \times 120) = 5{,}500.$
Verandah side $(1 \times 10 \times 6\frac{1}{4} \times \frac{1}{3} \times 120) = 2{,}500.$

(3) Weight of beams—

$$(4 \times 13\tfrac{3}{4} \times 1\tfrac{3}{4} \times 1\tfrac{1}{4} \times 150) = 18{,}047.$$

(4) Weight of Partition wall over beams—

$$(3 \times 13\tfrac{3}{4} \times 14 \times \tfrac{1}{2} \times 140) = 40{,}425.$$

(5) Floor and plaster finish—

$(3\times13\frac{3}{4}\times10\times\frac{1}{3}\times40)=5,500.$

$(3\times\ 6\frac{1}{4}\times10\times\frac{1}{3}\times40)=2,500.$

(6) Live load—

$(1+\cdot9+\cdot8+\cdot7)=3\cdot4\times80\times13\frac{3}{4}\times10\times3\cdot4\times80=37,400.$

$\times\ 6\frac{1}{4}\times10\times3\cdot4\times80=\ 8,840.$

(7) Wall load—

$$\left.\begin{aligned}195&=1\times10\times1\tfrac{1}{2}\times13\\272&=1\times10\times1\tfrac{1}{2}\times15\tfrac{1}{2}\\330&=1\times10\times2\ \times16\tfrac{1}{2}\\290&=1\times10\times2\ \times14\tfrac{1}{2}\end{aligned}\right\}\times160=1,73,920$$

1,087

(8) Load of basement—

$$1\times10\times\frac{(3\frac{1}{2}\times2\frac{1}{2})}{2}\ 4\times160=19,200$$

(9) Load of foundation—

$$1\times10\ \frac{(7+4)}{2}\ 5\times160=44,000$$

(10) Load of concrete raft—

$$1\times10\times14\times1\tfrac{1}{2}\times150=31,500$$

(11) Load of concrete bed—

$$1\times10\times14\times2\times150=42,000$$

4,93,992

Deduct for voids $(54+73+160)\times160$ (47,200) 47,200

4,46,792

Net load 200 tons.

B.M. $\frac{WB^2}{2A}+\frac{WBC}{4A}$ $\qquad W=\frac{200}{10}=20$ tons

$B=3\frac{1}{2}$

$c=7$

$A=14$

$$=\frac{20\cdot0\times2240\times(3\cdot5)^2\times12^2}{2\times14\times12}+\frac{20\times2240\times(3\cdot5\ 7\times12}{4\times14}$$

$$=\frac{240\times12\times2240}{28}=4,51,600 \text{ in lbs. say } \textit{4,52,000}$$

$$d=\frac{\sqrt{4,52,000}}{120\times12}=(17\cdot1''+2)=19''$$

$$\text{Steel}=\frac{4,52,000}{0\cdot87\times19\times18,000}=1\cdot58 \text{ sq. inch.}$$

$\frac{3}{4}''$ M.S. @ $3\frac{1}{2}''$ c/c.

$\frac{5}{8}''$ @ 2″ c/c.

*For Longitudinal steel.*

Assuring 10′ as the span over which the load is distributed.

$BM=\frac{Wl^2}{10}$ $\qquad$ 192 tons for 14′ width

Therefore for foot run $\frac{192}{14}=13\cdot7$

$$=\frac{13\cdot7\times10\times10\times12\times2240}{10\times10} \text{ in lbs.}$$

$=4,60,032$ in lbs.

$$\text{Steel area}=\frac{4,60,032}{0\cdot87\times18\times18,000}$$

*i.e.*, use $\frac{5}{8}''$ rods @ 2″c/c.

### (4) Design for 5″ roof slab

*Loads*--

| | | |
|---|---|---|
| Live load | ... | 100 lbs/sq″ |
| Floor finish | ... | 40 ,, |
| Dead load | ... | 75 ,, |
| | | 215 lbs/sq″ |

$$BM=\frac{wl^2}{8}=\frac{215\times11\times11\times12}{8}=39{,}022 \text{ lbs.}$$

$$d=\frac{\sqrt{39.022}}{126\times12}=5''+\text{cover}=6''\text{ thick}$$

$$\text{Reinforcement}\quad\frac{39{,}022}{0{\cdot}87\times5\times18{,}000}=0{\cdot}5 \text{ sq. inch.}$$

Use $\frac{1}{2}$″ M.S. rods at $4\frac{1}{2}$″ c/c
$\frac{3}{8}$″ rods at 12″ c/c for distribution.

### (5) Design for an R.C.C. rectangular beam

| | | | |
|---|---|---|---|
| 1 | Span of beam | ... | $27\frac{1}{2}'$ |
| 2 | Spacing of beams | ... | 10′ c/c |
| 3 | Thickness of slab | ... | 6″ |
| 4 | Size of beam | ... | 18″×21″ (below slab) |

Loads per rft. of beam--

| | | | |
|---|---|---|---|
| (*a*) | Load of weatherproof coat and tiles | .... | $10\times\frac{1}{2}\times120=600$ lbs. |
| (*b*) | Load of roof slab | .... | $10\times1\times150=750$ ,, |
| (*c*) | Load of beam | .... | $1\frac{1}{2}\times1\frac{3}{4}\times150=399$ ,, |
| (*d*) | Ceiling plaster 1″ | .... | $10\times1/12\times1\times120=100$ ,, |
| (*e*) | Live load | .... | $10\times1\times100=1000$ ,, |
| | | | 2849 say 2900 lbs/rft. |

$$BM=\frac{W12}{8}=\frac{363\times27{\cdot}5\times27{\cdot}5\times12}{8}=32{,}89{,}687 \text{ say } 32{,}90{,}000$$

$$At=\frac{32{,}90{,}000}{18000\times87\times21}=\frac{3290}{328}=10 \text{ sq. inch.}$$

*Use* 10 *rods of* $1\frac{1}{8}$″ dia.

$$RM=126bd^2$$
$$=126\times18\times21\times21$$
$$=10{,}00{,}200 \text{ in lbs.}$$

$$\frac{RM}{BM}\%=30\%\quad\text{So less than 53\%}$$

So, steel beam theory will be economical.
Hence use same number of rods for the compression flange also.

## APPENDIX II

### DATA AS PER MODIFIED DESIGN

**(1) Data for R.C.C. 1:2:4, two-way roof slab 24′×18′**

Quantity of concrete $18 \times 24 \times \frac{75}{12} = 270$ cft.

Quantity of steel:— $\frac{5}{8}$″ M.S. rods at 6″ c/c. short span
$\frac{1}{2}$″ M.S. rods at 12″ c/c. longer.

$\frac{5}{8}$″ dia. $= \left(\frac{18 \times 12}{6} + 1\right) = 37$ Nos. of $19\frac{1}{2}' = 702$ rft.

$\frac{1}{2}$″ dia. $\frac{24 \times 12}{12} + 1 = 25$ No. $\times 25 = 625$ rft.

*i.e.* $702 \times 1{\cdot}04 =$ 730 lbs.
$625 \times 0{\cdot}67 =$ 418 „
1148 lbs. or 0-10-1-0.

| | | Rs. | a. | p. |
|---|---|---|---|---|
| (1) 9 cyd. jelly 10-8-0 (allowing 10% bulkage) | ... | 94 | 8 | 0 |
| (2) $4\frac{3}{4}$ cyd. sand at 5-8-0 ... | ... | 26 | 2 | 0 |
| (3) 51 bags cement at 4/12 ... | ... | 252 | 4 | 0 |
| (4) 0-10-1-0 cwts. steel at 24/cwt. ... | . | 251 | 2 | 0 |
| (5) Binding wire 10 lbs. at 0 12-0 per lb. | ... | 7 | 8 | 0 |
| | | 621 | 8 | 0 |

*Labour*

| | | | | |
|---|---|---|---|---|
| (1) Centring charges at 40/sq. ... | ... | 180 | 0 | 0 |
| (2) Laying charges at 0-3-0/cft. ... | ... | 50 | 0 | 0 |
| (3) Fabrication at 2/cwt. ... | ... | 20 | 4 | 0 |
| | | 250 | 14 | 0 |

| | | Rs. | a. | p. |
|---|---|---|---|---|
| Labour ... | ... | 250 | 14 | 0 |
| Materials ... | ... | 621 | 8 | 0 |
| Total | ... | 872 | 6 | 0 |
| Cost per cft. $\frac{872\text{-}6\text{-}0}{270} =$ | | 3 | 4 | 6 |
| Add for scaffolding and other incidental charges. | | 0 | 2 | 6 |
| | | 3 | 7 | 0/cft. |

**(2) Data for a R.C.C. two-way slab 30′×30′**

Concrete—$30 \times 30 \times 5/6 = 750$ cft.

Steel $\frac{3}{4}$″ M.S. rods $2\left(\frac{30 \times 12}{6\frac{1}{2}} + 1\right) = 56 \times 2 = 112$ Nos.

*i.e.* 112 Nos. of length $(30+2) = 32'$

*i.e.* $= 32 \times 112 \times 1{\cdot}5 = 5376$ lbs. or 48 cwts.

*Materials*

| | Rs. | a. | p. |
|---|---|---|---|
| (1) 675 cft. jelly or 25 cyd. at 10-8-0 (allowing for 10% bulkage) .... .... .... | 262 | 8 | 0 |
| (2) 13⅓ cyd. sand at 5-8-0 (allowing 10% wastage) .... | 79 | 12 | 0 |
| (3) 141 bags cement at 4-12-0 .... .... | 669 | 12 | 0 |
| (4) 48 cwts. ¾″ M.S. rods at 24/- .. .... | 1,152 | 0 | 0 |
| (5) Binding wire 20 lbs. (at 2 lbs/sq.) .... | 17 | 8 | 0 |
| | 2,181 | 8 | 0 |
| Centring charges at 40/sq. .... .... | 360 | 0 | 0 |
| Laying charges including curing 750 cft. at 0-3-0 cft.... | 140 | 10 | 0 |
| Fabrication charges at 2/cwt. .... .... | 96 | 0 | 0 |
| | 2,778 | 2 | 0 |

Cost per cft $\frac{2,778\text{-}2\text{-}0}{750}$ = 3-11-6/cft.

| | | | |
|---|---|---|---|
| Add for scaffolding, and other incidental charges ... | 0 | 2 | 6 |
| | 3 | 14 | 0/cft. |

**(3) Data for Raft foundation as per modified Design**

(*a*) Concrete $10 \times 14 \times 1\frac{1}{2} = 210$ cft.

*Material.*—Steel.

along 10′ side $\left(\frac{10 \times 12}{2} \pm 1\right)$ 61 Nos. of 14′ long = 854 rft.

along 14′ side $\left(\frac{14 \times 12}{2 \cdot 5} + 1\right)$ 85 Nos. of 10′ long 850 rft.

1,704 rft.

Add for hooks .... 106 rft

or 1,810 at 1·04 lbs./rft.

1,862 lbs.

| Concrete (allowing 10% bulkage) | Rs. | a. | p. |
|---|---|---|---|
| 7 cyd. jelly at 10-8-0 .... | 73 | 8 | 0 |
| 3¾ cyd. sand 5-8-0 .... | 20 | 10 | 0 |
| 40 bags cement 4-12-0 .... | 190 | 0 | 0 |
| (0-16-2-14) 5/8″ M.S. rods 24/cwt. | 407 | 5 | 0 |
| Binding wire 5 lbs. at 0-12-0 .... | 3 | 12 | 0 |
| Mixing charges etc., 0-3-0/cft. .... | 39 | 6 | 0 |
| Fabrication charges at 2/cwt. .... | 32 | 8 | 0 |
| | 766 | 13 | 0 |
| Cost per cft. of rft. .... | 3 | 12 | 4 |

(*b*) Using ¾″ M.S. Rods.

¾″ M. S. rods at 3¼″ c/c.

Steel on the 10′ side $\left(\frac{10 \times 12}{3 \cdot 25} + 1\right)$ = 38 Nos.

14′ side $\left(\frac{14 \times 12}{3 \cdot 25} + 1\right)$ = 53 rods.

*i.e.*, $38 \times 14$ = 532

hooks $38 \times \frac{3}{4} \times 2$ = 57

$53 \times 10$ = 530

1,119 rft. at 1·5 lbs./rft.

or 1,678 lbs. or 0-15-0-0.

*Materials*—

| | | Rs. | a. | p. |
|---|---|---|---|---|
| Jelly, sand, cement | .... | 284 | 2 | 0 |
| 0-15-0-0 ; ¾" M. S. rod at 24/- | .... | 360 | 0 | 0 |
| Binding wire 5 lbs. 0-12-0/- | .... | 3 | 12 | 0 |
| Fabrication charges at 2/- cwt | .... | 30 | 0 | 0 |
| Laying charges | .... | 39 | 6 | 0 |
| | | 719 | 0 | 0 |
| Cost per cft. | .... | 3 | 7 | 0 |

### (4) Data for a 6" R.C.C. slab, as per modified design

Design : ½" M.S. rods at 4½" c/c (main rods)
⅜" do 12" c/c (distribution)

Steel : ½" rods $\left(\frac{10\times12}{4\frac{1}{2}}+1\right)$ = (27+1)=28 Nos.

⅜" rods $\left(\frac{10\times12}{12}+1\right)$ =11 Nos.

28 Nos. of 10′+9″=10¾×28=301 rft. = 202 lbs.
11 Nos. (10+9″) = 118 rft. = 45 lbs.
247 lbs.

247 lbs. or 0-2-0-23 wt.

*Materials*

| | | | Rs. | a. | p. |
|---|---|---|---|---|---|
| 1⅔ cyd. jelly at 10-8-0 (allowing 10 per cent bulkage)... | | | 17 | 8 | 0 |
| 1 cyd. sand at 5-8-0 | .... | .... | 5 | 8 | 0 |
| 9 bags cement at 4-12-0 | ... | .... | 42 | 12 | 0 |
| 247 lbs or 0-2-0-23 M.S. rods at 24/- | ... | .... | 54 | 0 | 0 |
| Laying charges at 0-3-0 cft. for 50 cft. | ... | ... | 9 | 6 | 0 |
| Fabrication charges at 2/- cwt. | ... | ... | 4 | 4 | 0 |
| Centring charges | .... | ... | 40 | 0 | 0 |
| Add for scaffolding and curing charges | ... | ... | 3 | 10 | 0 |
| | | | 177 | 0 | 0 |

### (5) Data for R.C.C. beam 1 : 2 : 4

1⅛"—20 rods of 30 rft. 600 rft. } 610×3·38 lbs. = 2,062 lbs.
Distance rods 10 rft. }
Two bars at top 1" dia. 60 rft. 60×2·67 lbs. = 160 lbs.
Stirrups—½ M.S. rods—100×7=700×·67 = 469 lbs.
2,691 lbs.

Concrete—$29\times1\frac{1}{2}\times2\frac{1}{4}=29\times3/2\times9/4=\frac{783}{84}$ = 98 cft.

*Materials*

| | | | Rs. | a. | p. |
|---|---|---|---|---|---|
| 3¼ cyd. jelly 10-10-0 | ... | .... | 34 | 8 | 0 |
| 1¾ cyd. sand 5-8-0 | .... | .... | 9 | 10 | 0 |
| 18½ bags at 4-12-0 | ... | ... | 87 | 14 | 0 |
| 2691 lbs/- 24/- cwt. | .... | ... | 589 | 5 | 0 |
| 8 lbs. binding wire at 0-12-0 | .... | .... | 6 | 0 | 0 |
| | | | 728 | 5 | 0 |

*Labour*

| | | | |
|---|---|---|---|
| (*a*) Bar bending charges at 2/- cwt. ... ... | | 48 | 0 0 |
| (*b*) Laying charges at 3-6-0/cft. ... ... | | 21 | 8 0 |
| | | 69 | 8 0 |
| (*c*) Centring charges 0-9-0/cft. .... ... | | 55 | 2 0 |
| | | 124 | 10 0 |

| | | | |
|---|---|---|---|
| Materials ... | .... | 728 | 0 0 |
| Labour ... | .... | 124 | 10 0 |
| Total | ... | 852 | 10 0 |

Cost per cft. $\frac{852\text{-}10\text{-}0}{98}$ = 8 11 0/cft.

Add for scaffolding and other incidental charges. 0 2 6

8 13 6 say,
8 14 0/cft. for III floor

## Appendix III—Vidhana Soudha Enquiry Committee.

Comparative statement showing the details of Design and cost as adopted and as per modified Design and Data.

| Sl. No. | Item | Details of Section | | Details of reinforcements | | Details of cost | | | Remarks |
|---|---|---|---|---|---|---|---|---|---|
| | | As adopted, based on Design or Data | As per Design worked out | As adopted, based on Design or Data | Actually necessary as per Design worked out | As per provisions in Rs. 130 lakhs est., based on Data or Design, corresponding to Col. 5. | As per scrutiny of provisions in Rs. 130 lakhs est., scrutiny of Data, corresponding to Col. 5. | As per actuals based on Data corresponding to Col. 6. | |
| 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 |
| 1 | R.C.C. 1 : 2 : 4 raft for foundations (10′×14′). | 18″ thick. | 18″ thick | *(a) ¾″ M S. rods at 4″ c/c. parallel to width.<br>(b) ¾″ M.S. rods at 6″ c/c. parallel to length.<br>Quantity (0—10—3—14). | (a) ¾″ M.S. rods at 3½″ c/c. parallel to width.<br>(b) ¾″ M.S. rods at 4″ c/c. parallel to length.<br>Quantity (0—16—2—14). | 3—0—0/cft. ... | 2—14—0/cft. ... | 3—7—0/cft. ... | *Design not made available—Details from data considered. |
| 2 | R.C.C. 1 : 2 : 4 two-way reinforced roof slab (18′×24′). | 9″ thick | 7½″ thick | (a) ⅝″ rods at 5″ c/c. for shorter span.<br>(b) ½″ rods at 6″ c/c. for longer span.<br>Quantity (0—15—1—4). | (a) ⅝″ rods at 6″ c/c.<br>(b) ½″ rods at 12″ c/c.<br>Quantity (0—10—0—12) | 4—4—0 to 4—10—0/cft. (for different floors). | 4—0—0/cft. (for 1st floor). | 3—7—0/cft. | Common rate of Rs. 4-4-0/cft. incorporated in Rs. 130 lakhs estimate irrespective of the span and the thickness of slab. |
| 3 | Do do (30′×30′). | 12″ thick. | 10″ thick | (a) ¾″ rods at 5″ c/c. both ways.<br>Quantity (3—1—2—10). | (a) ¾″ rods at 6½″ c/c. both ways.<br>Quantity (2—8—0—0). | Do ... | Do ... | 3—14—0/cft. | |
| 4 | R.C.C. 1 : 2 : 4 roof slab 6″ thick (20×12½). | 6″ thick | 6″ thick | (a) ½″ M.S. rods at 4½″ c/c.<br>(b) ⅜″ M S. rods at 12″ c/c. for distribution.<br>(c) Additional rods for end fixity ½″ rods at 9″ c/c. (0—6—2—0). | (a) ½″ rods at 4½″ c/c.<br>(b) ⅜″ rods at 12″ c/c. for distribution.<br>(c) Additional rods not necessary. (0—4—1—14). | .....<br>200/sq. average | .....<br>192—0—0/sq. † | .....<br>177/sq. ... | †Due to extra provision for end fixity. |
| 5 | R.C.C. 1 : 2 : 4 rectangular beam as adopted for general offices for topmost floor 27½′ span at 10′ apart. | (1¼×2¼) | (1⅛′×2¼′) | (a) 9 rods of 1⅛″ dia. both at top and bottom. Load 2350 lbs./sft. | (a) 10 rods of 1⅛″ dia. both at top and bottom. Load 2900 lbs./sft. | Not shown ... | ... | 8—14—0/cft. ... | Inadequate quantity of steel, owing to load considered being less than actuals, with the omission of live load. |

Letter No. 1240 dated 11th August 1954 from the Special Engineer, (Houses of Legislature) Vidhana Soudha Dn., Bangalore to Chief Engineer of Mysore, Bangalore.

*Subject*:—Abstract estimate for Rs. 120 lakhs for the Vidhana Soudha Works, Bangalore.

I write to enclose herewith the abstract estimate for Rs. 120 lakhs for the construction of Vidhana Soudha Building at Bangalore. An estimate amounting to Rs. 50 lakhs has been administratively sanctioned by Government in their order No. P. W. 10280-81/RB-6-54-4 dated 9th June 1954 for the building proper. This is exclusive of the services such as electrical, water supply, sanitary works, roads, garages, etc. It is now estimated that the total cost of all these works would be approximately Rs. 120 lakhs as detailed in the enclosed estimate. Detailed estimates for each of the items of the enclosed abstract estimate are under preparation and will be submitted for sanction in due course. An advance copy of this is being forwarded to the Secretary, Public Works Department, Bangalore for favour of information of Government.

## ABSTRACT ESTIMATE FOR PROBABLE COST OF CONSTRUCTING VIDHANA SOUDHA BUILDING AT BANGALORE.

| | *Item of work* | *Approximate cost in lakhs of Rs.* | *Remarks* |
|---|---|---|---|
| 1. | Building proper in ground, first and second floors including the cellar floor on the southern side | 50·00 | Administrative sanction by Government in their No. P.W. 10280-81/RB6-544 dated 9th June 1954. |
| 2. | Extra cost for the above due to the introduction of Architectural features and due to changes in design | 15·00 | This amount will be required to provide for changes in design and to accommodate architectural features as now contemplated. |
| 3. | Building the III floor not contemplated in the original estimate but now proposed to be constructed along with the other floors. | 12·00 | This is a later addition not contemplated in the original scheme. Detailed estimate for items 1, 2 and 3 will be got up and submitted for Technical sanction. |
| 4. | Constructing 30 garages on the Northern side of the building | 1·00 | This is also one of the items not contemplated in the original scheme. Detailed estimates will be got up and submitted for sanction. |
| 5. | Constructing 16 underground garages and 500 cycle stands on the southern side of the building | 3·00 | do |
| 6. | Providing electric lights, mike arrangements, etc. | 12·00 | Detailed estimate as got up by the Electrical Department is submitted to Government. |
| 7. | Providing telephones for the building | 1·00 | Detailed estimate will be got up and submitted for sanction. |
| 8 | Connected water supply and sanitary works for the building | 7·00 | Detailed estimate which was examined and passed by the Vidhana Soudha Techl: Committee is submitted to the Chief Engineer for obtaining sanction of Government. |
| 9. | Providing forced ventilation system for the Assembly Hall and Council Hall. | 4·00 | Detailed estimate will be got up and submitted for sanction. |
| 10. | Providing electric lifts to the building | 2·50 | The lowest quotation of Messrs. Larsen & Toubro for supply of five lifts (four passenger and one goods) has been approved by the Vidhana Soudha Tech. Committee and orders for supply of the same have been placed with the firm through Stores Purchase Committee. |
| 11. | Probable cost of art treatment for the Assembly and Council Halls | 2·00 | This is contemplated as per instructions of the Chief Minister. |
| 12. | Veneering for dome and gold plating the top, etc. | 1·00 | Detailed estimate will be got up and submitted for sanction. |
| 13. | Forming Vidhana Veedhi in the Residency compound (concrete road) | 2·00 | Detailed estimate which is under preparation will be submitted for sanction. |
| 14. | Forming concrete road alround the building as per the comprehensive plan | 1·00 | Detailed estimate will be got up and submitted. |
| 15. | Probable cost of furnishing the building with furniture, carpets, etc. | 4·00 | do |
| 16. | Layout of gardens and electric clock system and illumination of lights. | 2·00 | do |
| | **Total:** | 120·000 | **Rupees one hundred and twenty lakhs.** |

## CHAPTER X—ANNEXURE VIII.

Letter No. 1324 dated 18th February 1955 from the Special Engineer, Vidhana Soudha Division, Bangalore, to the Chief Engineer of Mysore, Bangalore.

*Subject* :—Detailed estimate for Vidhana Soudha.

In inviting reference to letter No. P.W.B. 7768-89 dated 17th February, 1955 addressed to you by the Secretary to Government, P.W.D., Bangalore, on the above subject, I write to enclose herewith a modified abstract estimate for 120 lakhs for constructing Vidhana Soudha. This is based on the detailed estimates which are getting ready and will be submitted in a few days. The delay in submission of the detailed estimate has become unavoidable due to several designs and architectural features having not yet been finalised. Any estimate based on plans which are not finalised, would again be appoximate and will have to be further revised. To avoid this, the detailed estimates are being got up basing them mostly on the finalised designs and will be submitted shortly.

An advance copy of this letter together with a copy of the modified abstract estimate is being forwarded to the Secretary to Government, P.W.D., for information.

MODIFIED ABSTRACT ESTIMATE OF CONSTRUCTING VIDHANA SOUDHA

| | Items of work | As per statement 'B' | Cost in lakhs of rupees | Remarks. | |
|---|---|---|---|---|---|
| 1. | Building proper in ground, first, second and third floors, inclusive of all architectural features ... | 50·00 )<br>15·00 )<br>12·00 ) | 90·00 | As per detailed estimate being finalised | + 13·00 |
| 2. | Constructing 30 garages on the northern side of the building ... | 1·00 | 1·00 | .. | |
| 3. | Providing electric lights, mike, arrangements, etc. | 12·00 | 8 00 | As per detailed estimate | — 4.00 |
| 4. | Water supply and sanitary works, of the building. ... | 7·00 | 4·00 | do | — 3.00 |
| 5. | Forced ventilation system for the assembly and council halls ... | 4·00 | 2·00 | As per quotations | — 2.00 |
| 6. | Electric lifts. | 2 50 | 2·00 | do | — 0.50 |
| 7. | Providing art treatment for assembly and council halls ... | 2 00 | 5·00 | ... | + 3.00 |
| 8. | Veneering for the Central Dome and Gold plating the top, etc. ... | 1.50 | 1.50 | | |
| 9. | Forming concrete roads alround the building as per the comprehensive plan | 1·00 | 1·00 | | |
| 10. | Furnishing the assembly and the council halls with carpets and furniture. | 4·00 | 2·00 | ... | — 2·00 |
| 11. | Tools and plant. | | 1·00 | ... | + 1·00 |
| 12. | Temporary buildings | | 0·50 ] | | |
| 13. | Levelling the ground | | 1·00 ] | | + 2·50 |
| 14. | Unforeseen and miscellaneous | | 1·00 ] | | |
| 15. | Constructing 15 underground garages & 500 cycle stands on the southern side... | 3·00 | ... | | — 3·00 |
| 16. | Providing telephones for the building | 1·00 | ... | | — 1·00 |
| 17. | Layout of gardens and electric clock system and illumination of lights. ... | 2·00 | ... | | — 2·00 |
| 18. | Forming Vidhana Veedhi. ... | 2·00 | ... | | — 2·00 |
| | Total | 120·000 | 120·000 | | |

## CHAPTER X—ANNEXURE IX.

General Abstract estimate of construction of Vidhana Soudha—Estimate for Rs. 130 lakhs.

| | *Items of work* | *Cost in lakhs* | *Remarks* |
|---|---|---|---|
| 1 | Building proper in ground, First, Second and Third floors, inclusive of Architectural features. | 102·00 | As per detailed estimate. |
| 2 | Constructing 30 garages on the northern side of the building. | 1·00 | |
| 3 | Providing Electric Lights, Mike arrangements, etc. ... | 3·00 | Detailed estimate sanctioned |
| 4 | Water Supply and Sanitary works of the building ... | 5·00 | Detailed estimate separately sent. |
| 5 | Forced Ventilation system for the Assembly and Council Halls. | 2·00 | As per quotations. |
| 6 | Electric Lifts ... ... ... | 2·00 | ,, |
| 7 | Providing Art Treatment for the Assembly and Council Halls. | 4·00 | |
| 8 | Veneering for the Central Dome and Gold plating the top, etc. | 1·50 | |
| 9 | Forming Roads alround the building as per the comprehensive plan. | 0·50 | |
| 10 | Furnishing the Assembly and Council Halls with Carpets and Furniture. | 1·50 | |
| 11 | Tools and Plant ... ... ... | 0·50 | |
| 12 | Temporary buildings ... ... ... | 0·50 | |
| 13 | Levelling the Ground ... ... ... | 1·00 | |
| 14 | Unforeseen and Miscellaneous ... ... ... | 0·50 | |
| | Total | 130·00 | |

(Sd). M. MUNIAPPA,
*Special Engineer, V. S. Division.*

## CHAPTER X—ANNEXURE X.

Office of the Executive Engineer,
Vidhana Soudha Division,

No. 8100/V.S. Bangalore, dated 14th December 1956.

To

The Secretary,
Vidhana Soudha Enquiry Committee,
Victory Hall, Bangalore.

Sir,

As desired by the Committee, I write to confirm that a detailed estimate for Rs. 117.00 lakhs for the (Civil Building portion of Engineering works) of Vidhana Soudha was prepared by me along with the other Assistant Engineers of Vidhana Soudha and the same was submitted to the Special Engineer for obtaining sanction. In this estimate, a provision of Rs. 9,41,880 was made for the Central Main Dome and this was subsequently reduced to Rs. 7,21,880 by the Special Engineer and this reduced amount was included in the estimate for Rs. 130,00,000 Lakhs which was submitted for sanction. The main estimate for Rs. 117 lakhs for civil engineering works of the building proper as submitted by me was also reduced by the Special Engineer by Rs. 15 lakhs to Rs. 102 lakhs and included in the Rs. 130 lakhs estimate submitted for sanction, This is for kind information.

M. B. KRISHNA IYENGAR,
*Executive Engineer, Vidhana Soudha Division.*

## CHAPTER X—ANNEXURE XI.

### INSPECTION NOTE OF THE CHIEF ENGINEER OF MYSORE, ON VIDHANA SOUDHA BUILDINGS-JUNE 7th 1956.

It was instructed several times that the Vidhana Soudha Building, except the Central tower, should be completed in all respects by the 18th June 195 , but, though 90 per cent of the work has been completed, much of the miscellaneous works are still going on. It is absolutely necessary that all works should be completed and brought to a finishing stage, ready and fit for occupation. The Special Engineer, Executive Engineers and Assistant Engineers and subordinate staff should put forth their best efforts and complete all the remaining items of work and see that the building is completed in all respects by the 18th June 1956, as previously instructed and specified (except the Central dome portion). Any delay in this respect will be viewed with displeasure.

The Central dome portion will take some more months and the work should be done with all care in order to ensure maximum efficiency and strength.

The detailed estimate has been sanctioned for Rs. 130 lakhs. The Special Engineer, Executive Engineers and Assistant Engineers should study each item specifically and see that the works are done as economically as possible and no excess is allowed to occur under any item. It is seen that elaborate dressing and palmane work is being done. It should be possible to reduce it to the barest minimum consistent with beauty and architecture of the building. The estimate provision for each item should be carefully looked into and accordingly work arranged to be done and in no case should excess work or over-doing of work be done. Cost is the main criterion. The detailed estimate for Rs. 130 lakhs has been carefully prepared and has been sanctioned by Government. It is the responsibility of the Special Engineer to regulate the work in all stages, economise in costs and complete the building within the estimated cost. It is also his responsibility to see that excess over items is not allowed to occur; should any excess were to occur over the sanction of Rs. 130 lakhs, he shall be personally responsible. Unprovided items should not be done; if they are absolutely needed, special sanction has to be got well in advance, and even in such cases they should be limited to the minimum. Items which are not immediately required and could be deferred, have to be deferred to minimise in costs. That the work should be completed within Rs. 130 lakhs should be the main responsibility, and if every item is critically scrutinised and economy exercised, it shall be possible to work it out and complete the building within this amount. The Executive Engineers and Assistant Engineers should also note this, and as pointed out on several inspections, each item should be critically scrutinised and completed with utmost economy in costs.

The Special Engineer and his staff should endeavour their best to complete the building in all respects by the 18th June 19 6, except for the Central Tower.

H. ANANTHACHAR,
*Chief Engineer of Mysore.*

Comparative statement showing the Items of work, quantity and rate as provided in the estimates for Rs. 50 lakhs and Rs. 130 lakhs

| Sl. No. in Ests. | Item of work | As per Rs. 50 lakhs estimate | | | | As per Rs. 130 lakhs estimate | | | Variations | | Remarks |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | | Unit | Quantity | Rate | Cost | Quantity | Rate | Cost | Quantity | Cost | |
| 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 |
| | | | | Rs. a. p. | Rs. | | Rs. a. p. | Rs. | | Rs. | |
| 1 | Earthwork excavation for foundation in different soils to a depth varying from 6′ to 14′. | C.yd. | 22,043 | 1 4 0 | 27,554 | 22,266 | 0 9 0 to 1 0 0 | 17,905 | +1,673 | −2,600 | At the time the estimate for Rs. 130 lakhs was got up, the earth work excavation had been completed and the quantity considered is therefore as per actuals. In spite of the greater quantity involved, inclusive of blasting of rock, there has been a savings as the provision in the Rs. 50 lakhs estimate has been liberal. |
| (1) | (*a*) Blasting stiff soft rock ... | | ... | ... | ... | 250 | 4 0 0 | 1,000 | | | |
| | (*b*) Blasting hard rock with dynamite. | | ... | ... | ... | 1,200 | 5 0 0 | 6,000 | | | |
| 2 (2) | Granite stone jelly cement concrete 1:3:6 for foundation laid in 4″ to 6″ layers. | C.ft. | 1,04,388 | 1 4 0 | 1,30,485 | 84,626 | 1 2 0 | 95,204 | −(7,569) | +40,444 | Even though the quantity involved has been less, the cost has been more, on account of the increased quantity involved under raft foundations, involving higher rate. |
| 3 (3) | R.C.C. raft foundation for heavily loaded walls (wherever necessary). | C.ft. | 26,097 | 1 8 0 | 39,145 | 38,290 | 3 0 0 | 1,14,870 | | | |
| 4 | R.C.C. 1:1½:3 foundation for columns with heavy reinforcement. | C.ft. | 10,781 | 4 0 0 | 43,124 | ... | ... | ... | +34,969 | +1,40,936 | With the contemplated increased height of the central dome, and the increase in weight, not only due to the increased height but also due to the cut stone work with pediments etc., and owing to the cantilever balconies of a wider type on the sides of the dining hall, the column had to have deeper and stronger foundations. Hence the excess both in quantity and in cost. |
| (4) | (*a*) For columns in the Central Hall and other portions (R.C.C. raft 1:2:4). | C.ft. | ... | ... | ... | 30,029 | 3 4 0 | 97,594 | | | |
| (4) | (*b*) For heavily loaded columns of the Central Dome. | C.ft. | ... | ... | ... | 15,721 | 5 8 0 | 86,466 | | | |

Comparative statement showing the Items of work, quantity and rate as provided in the estimates for Rs. 50 lakhs and Rs. 130 lakhs.

| Sl. No. in Ests. | Item of work | As per Rs. 50 lakhs estimate | | | | As per Rs. 130 lakhs estimate | | | Variations | | Remarks |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | | Unit | Quantity | Rate | Cost | Quantity | Rate | Cost | Quantity | Cost | |
| 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 |
| | | | | Rs. a. p. | Rs. | | Rs. a. p. | Rs. | | | |
| 5 | Granite S.S. masonry hammer dressed in CM 1:6 in courses not less than 9" with bond stone at every 6' for foundation and basement. | C.ft. | 2,03,205 | 1 2 0 | 2,28,606 | ... | ... | ... | ... | ... | |
| (5) | (*a*) Granite S.S. masonry hammer dressed in CM 1:6 for foundation. | ... | ... | ... | ... | 1,37,453 | 1 2 0 | 1,54,635 | ... | ... | |
| 6 | Three line dressing to stone masonry basement to the verandah wall alround. | S.ft. | 19,117 | 1 0 0 | 19,117 | ... | ... | ... | ... | ... | |
| (6) | (*a*) Granite S.S. masonry in CM for basement (*a*) using Bettahalsur stones in 9" courses for inner walls. | C.ft. | ... | ... | ... | 15,783 | 1 3 0 | 18,742 | ... | ... | |
| | (*b*) using Mallasandra stones for facing and Bettahalsur stones for backing in 9" courses for the interior walls of quadrangle. | C.ft. | ... | ... | ... | 12,754 | 1 6 0 | 17,537 | ... | ... | |
| | (*c*) with Hessarghatta stone facing and Bettahalsur stone backing for the outer walls in courses 12" hammer dressed. | C.ft. | ... | ... | ... | 3,140 | 1 7 0 | 4,514 | ... | ... | |
| | (*d*) with two line dressed Hessarghatta stones facing and Bettahalsur stones backing in courses 12". | C.ft. | ... | ... | ... | 8,974 | 1 14 0 | 16,265 | ... | ... | |
| | (*e*) with Hessarghatta burnt stones with two line dressing for a width of ½" alround and Bettahalsur stones backing in 12" courses. | ... | ... | ... | ... | 6,212 | 2 4 0 | 13,977 | ... | ... | |
| | (*f*) Providing and fixing bottom basement slab two line dressed with cymarecta design 12" wide 12" thick. | R.ft. | .. | ... | ... | 2,043 | 9 0 0 | 18,387 | ... | ... | |
| | (*g*) Providing 1:2:4 R.C.C. for backing to cymarecta slab. | C.ft. | ... | ... | ... | 4,228 | 3 8 0 | 14,798 | ... | ... | |

| | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | (*h*) Providing and fixing 2′×2′×2′ flower stones two line dressed as per design. | Nos. | ... | ... | ... | 137 | 23 0 0 | 3,151 | ... | ... | |
| | (*i*) Providing and fixing 2′×1′×1′ with flower design on one face. | Nos. | ... | ... | ... | 72 | 13 0 0 | 956 | ... | ... | |
| | (*j*) Providing and fixing with flower design on two faces. | Nos. | ... | ... | ... | 75 | 22 0 0 | 1,650 | ... | ... | |
| (7) | (*a*) Providing and fixing for top of basement of outer walls 2 line dressed Hessarghatta slab 24″ wide and 12″ thick front face cut to step design in CM 1 : 6. | R.ft. | ... | ... | ... | 2,291 | 8 8 0 | 19,474 | ... | ... | |
| | (*b*) Providing and fixing Slabs as above for inner walls facing the quadrangle 12″ wide and 10½″ thick. | R.ft. | ... | ... | ... | 2,050 | 4 8 0 | 9,245 | ... | ... | The variation in quantities is not easily computable, owing to change in specifications and break-up. The net excess in cost is Rs. 27,396, owing mainly to the adoption of special stones for the basement top and of superior finish. |
| | (*c*) Providing and fixing Slabs as above 24″ wide 10½″ thick for verandah on either side of Central Hall. | R.ft. | ... | ... | ... | 321 | 8 0 0 | 2,568 | ... | ... | |
| | (*d*) Providing and fixing Slabs as above 18″ wide and 12″ thick. | R.ft. | ... | ... | ... | 518 | 7 8 0 | 3,885 | Not comparable | +27,396 | |
| 7 | Burnt stone slab 12″ thick set in CM 1:6 with three line dressing for exposed face and one line dressing for the other faces. | S.ft. | 15,046 | 3 0 0 | 45,138 | ... | ... | ... | ... | ... | |
| | (*a*) Burnt stone slab 6″ thick for steps | S.ft. | 1,500 | 1 12 0 | 2,625 | ... | | ... | ... | ... | |
| 8 | R.C.C. slab 12″ thick for basement of inner walls. | C.ft. | 9,301 | 2 8 0 | 23,253 | ... | ... | ... | ... | ... | |
| (8) | R.C.C. basement slab for inner walls and backing to slab under item No. (7) above and reinforcement as per design | C.ft. | ... | ... | ... | 13,243 | 3 8 0 | 46,351 | ... | ... | |
| 9 | Providing and fixing dressed size stone masonry pillars for verandah in G.F. three line dressed for all faces including base and capital as per design. | C.ft. | 21,790 | 3 8 0 | 76,265 | ... | ... | ... | ... | ... | |
| (9) | (*a*) Providing and fixing cut stone pillars of 11′ height with shaft 3½′ x 2½′ two line dressed with Pulmani finish including base and capital for Verandah. | Nos. | ... | ... | ... | 84 | 900 0 0 | 75,600 | ... | ... | |
| | (*b*) Providing and fixing cut stone pillar 11′ high with stepped shaft 3½′ x 2½′ two line dressed with Pulmani finish including base and capital for front verandah. | Nos. | ... | ... | ... | 36 | 950 0 0 | 34,200 | ... | ... | |
| (10) | Providing and fixing cut stone circular pillars 12″ dia. and 11′ high, two line dressed and pulmani finished with base and capital as per design. | Nos. | ... | ... | ... | 36 | 200 0 0 | 7,200 | ... | ... | |

Comparative statement showing the Items of work, quantity and rate as provided in the estimates for Rs. 50 lakhs. and Rs. 130 lakhs.

| Sl. No. in Ests. | Item of work | As per Rs. 50 lakhs estimate | | | | As per Rs. 130 lakhs estimate | | | Variations | | Remarks |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | | Unit | Quantity | Rate | Cost | Quantity | Rate | Cost | Quantity | Cost | |
| 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 |
| | | | | Rs. a. p. | | | Rs. a. p. | | | | |
| 10 | Providing hoisting, and fixing cutstone circular pillars in G.F. and F.F. and S.F. 2 to 2½′ dia. 14′ to 28′ high including base and capital, complete three line dressing and finished. | C.ft. | 22,361 | 6 0 0 | 1,34,166 | ... | ... | ... | ... | ... | |
| 11 | Providing hoisting and fixing cut stone pillars in I and II floors 2½′ sq. and 28′ high including base and capital, complete three line dressing and finished as per design. | C.ft. | 28,000 | 6 0 0 | 1,68,000 | ... | ... | ... | ... | ... | |
| (11) | (*a*) Do ... | Nos. | ... | ... | ... | 123 | 1,900 0 0 | 2,33,700 | ... | ... | |
| | (*b*) do half pillars at ends. | Nos. | ... | ... | ... | 10 | 1,000 0 0 | 10,000 | ... | ... | |
| | (*c*) Providing hoisting and fixing cut stone pillars for the South entrance in basement and G.F. 14′ high 4′ x 2½′ two line dressed pulmani finished including base and capital. | Nos. | ... | ... | ... | 4 | 1,800 0 0 | 7,200 | ... | ... | |
| | (*d*) Providing and fixing circular pillars for the south entrance in I and II floors, 2½′ dia. 30′ high with base and capital including two line dressing and pulmani finishing. | Nos. | ... | ... | ... | 4 | 2,200 0 0 | 8,800 | ... | ... | |
| | (*e*) Providing and fixing cut stone pillars at side entrance in front and rear facades in I and II floors 2′ dia. 30′ high with base and capital including two line dressing and pulmani finishing. | Nos. | ... | ... | ... | 8 | 1,850 0 0 | 14,800 | ... | ... | |

| | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | (*f*) Providing hoisting and fixing cut stone circular pillars in I and II floors of N. Portico 2½′ sq. and 30′ high with base and fixing cut stone pillars 40′ high 3½′ dia. with base and capital, two line dressed and pulmani finished. | Nos | ... | ... | ... | 6 | 3,000 0 0 | 18,000 | ... | ... | |
| | (*g*) Providing hoisting and fixing cut stone pillars 40′ high 3½′ dia. with base and capital, two line dressed and pulmani finished for front portico as per design. | Nos. | ... | ... | ... | 12 | 7,500 0 0 | 90,000 | ... | ... | |
| | (*h*) Do half pillars at ends ... | Nos. | ... | ... | ... | 2 | 4,000 0 | 8,000 | ... | .... | Variation in quantities is not comparable, as the specification has been changed over from ordinary dressed stone masonry to cut stone masonry. This change-over in specification has resulted in the variation in cost, to Rs. 1,70,149-0-0. |
| | (*i*) Providing and fixing cutstone octagonal pillars 28′ high and 2½′ dia. with base and capitals for rear portico. | Nos. | ... | ... | ... | 6 | 2,700 0 | 16,200 | ... | ... | |
| | (*j*) half pillars at ends ... | Nos. | ... | ... | ... | 2 | 2,000 0 | 4,000 | Not comparable. | +1,70,149 | |
| | (*k*) Providing masonry pillars with three line pulmani dressed stones. | C.ft. | ... | ... | ... | 5,220 | 4 0 | 20,880 | | | |
| 12 | (*a*) Providing 1 : 2 : 4 R. C. C. circular columns including cement mortar plastering complete. | C.ft. | 7,741 | 5-8-0 | 42,576 | ... | ... | ... | ... | ... | |
| | (*b*) Do with marble lining ... | C.ft. | 3,522 | 8-0-0 | 28,176 | ... | ... | ... | ... | ... | |
| (12) | R.C.C. columns with 1 : 1 : 2 vibrated concrete using granite jelly up to 5/8″.— | | | | | | | | | | In addition to the increase in the section, resulting in greater quantity of 19,342 C.ft. the large variation in cost has been due to the adoption of richer concrete and higher percentage of reinforcement. |
| | (*a*) with 2 to 3 per cent reinforcement. | | | | | | | | | | |
| | (1) B. Floor. | C.ft. | ... | ... | ... | 4,250 | 5 0 | 21,250 | ... | ... | |
| | (2) G. Floor. | C.ft. | ... | ... | ... | 2,205 | 6 0 | 15,030 | ... | ... | |
| | (3) F. Floor. | C.ft. | ... | ... | ... | 112 | 6 0 | 672 | +19,342 C.ft. | +2,13,928 | |
| | (*b*) with 3 to 4½ per cent reinforcement. | C.ft. | ... | ... | ... | 6,459 | 8 8 to 9 4 | 56,234 | ... | ... | |
| | (*c*) with 4½ to 6 per cent reinforcement | C.ft. | ... | ... | ... | 17,579 | 10 8 to 11 4 | 1,91,494 | ... | ... | |
| 13 | Granite S. S. masonry in C.M. 1 : 6 rear line one line dressed and front three line dressed, courses not less than 10″ high with bond 6′ apart for superstructure. | | | | | | | | | | |
| | (*a*) one line dressed ... | C.ft. | 2,68,437 | 1-4-0 | 3,35 546 | ... | ... | ... | ... | ... | |
| | (*b*) three line dressed ... | | 2,68,437 | 1-12-0 | 4,69,764 | ... | ... | ... | —9,282 | +2,44,799 | |

Comparative statement showing the Items of work, quantity and rate as provided in the estimates for Rs. 50 lakhs and Rs. 130 lakhs.

| Sl. No. in Ests. | Item of work | As per Rs. 50 lakhs estimate | | | | As per Rs. 130 lakhs estimate | | | Variations | | Remarks |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | | Unit | Quantity | Rate | Cost | Quantity | Rate | Cost | Quantity | Cost | |
| 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 |
| | | | | Rs. | Rs. a. | | Rs. a. | Rs. | | Rs. | |
| (13) | Granite S.S. masonry in C.M. for superstructure with.— | | | | | | | | | | |
| | (a) Bettahalsur stones hammer dressed and 1 : 5 C.M. in courses 8″ and 9″ with bond stones 6′ apart. | C.ft. | ... | ... | ... | 1,32,679 | 1 5 to 1 9 | 1,93,576 | ... | ... | The total quantity of masonry has been less, in spite of the introduction of the third floor—The increase in the cost has been on account of change in specifications to superior types of work over the originally contemplated ordinary type of dressed stone work. |
| | (b) Do in C.M. 1 : 3 for window piers. | C.ft. | ... | ... | ... | 90,697 | 1 10 to 1 14 | 1,56,030 | ... | ... | |
| | (c) with Mallasandra face stones hammer dressed and Bettahalsur stones backing in C.M. 1 : 3. | C.ft. | ... | ... | ... | 40,831 | 1 11 to 1 13 | 70,750 | ... | ... | |
| | (d) Do in 1 : 5 C.M. ... | C.ft. | ... | ... | ... | 44,341 | 1 9 to 1 15 | 78,973 | ... | ... | |
| | (e) with Mallasandra two line dressed stones for window jambs in 1 : 3 cement mortar | C.ft. | ... | ... | ... | 36,523 | 2 4 to 2 8 | 85,433 | ... | ... | |
| | (f) Do with Hessarghatta stones two line dressed in 12″ courses and Bettahalsur stone backing in cement mortar 1 : 3. | C.ft. | ... | ... | ... | 63,081 | 2 1 to 2 7 | 1,42,847 | ... | ... | |
| | (g) Do in 1 : 5 C.M. ... | C.ft. | ... | ... | ... | 52,010 | 2 4 | 1,17,023 | ... | ... | |
| | (h) with Hessarghatta three line dressed stone in C.M. 1 : 3. | C.ft. | ... | ... | ... | 2,042 | 3 8 | 7,147 | ... | ... | |
| | (i) R. C. C. 1 : 2 : 4 up to 1 per cent reinforcement for heavily loaded piers between openings. | C.ft. | ... | ... | ... | 12,346 | 3 8 to 3 14 | 45,417 | ... | ... | |
| | (j) with Hessarghatta stones dressed true to square 12″ courses in C.M. 1 : 4 B.F. | C.ft. | ... | ... | ... | 6,035 | 1 12 | 10,561 | | | |
| | (k) Do with Mallasandra stones two line dressed on all exposed faces in C.M. 1 : 3 G.F. and first floor and 1 : 6 in 2nd and 3rd floors. | C.ft. | ... | ... | ... | 19,179 | 2 4 to 2 8 | 46,394 | —(9,282) | 2,44,799 | |

| | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | (*l*) R.C.C. walls 1 : 2 : 4 with 1 to 2 per cent reinforcement in Assembly Hall and other portions. | C.ft. | ... | ... | ... | 14,828 | 4 8 | 66,708 | ... | ... | |
| | (*m*) Wire cut bricks in C.M. 1 : 6 for panel walls. | C.ft. | ... | ... | ... | 13,000 | 2 4 | 29,250 | ... | ... | |
| 14 | (*a*) Burnt brick in C.M. 1 : 6 for cross walls. | C.ft. | 40,136 | 1 0 | 40,136 | ... | ... | ... | . . | ... | |
| | (*b*) Wire cut bricks in C.M. 1 : 6 ... | C.ft. | 1,512 | 1 2 | 1,701 | ... | ... | ... | ... | ... | |
| (14) | Wire cut bricks in C M. 1 : 6 for partition walls with necessary reinforcement at suitable intervals including cement plastering 1 : 4. | S.ft. | ... | ... | ... | 75,661 | 1 4 to 1 7 | 1,01,097 | —(13,274) | +59,260 | The decreased quantity is due to the changeover of specification from 9″ thickness to 4½″ thickness wire cut brick partition wall with reinforcement, involving an excess in cost. |
| 15 | Providing and fixing teak wood doors with 4″ × 5″ frame work with 1¾″ thick plank two leaves fully panelled shutters including copper oxidised heavy brass fittings with hinges, padlocks, brass tower bolts etc., with four coats polishing. | S.ft. | 13,500 | 7 8 | 1,01,250 | ... | ... | ... | ... | ... | |
| (15) | (*a*) Providing and fixing teak wood door with 3½″ × 5″ frame work with 1″ thick planks, ⅓ panelled and 2/3 glazed including special fittings teak wood beading, and 3-4 coats of polishing. | S.ft. | ... | ... | ... | 16,632 | 9 0 | 1,49,688 | ... | ... | The increase both in quantity and in cost is due to the increase in numbers with the addition of the third floor and due to change in specifications, and inclusion of special doors of large sizes with ornamental finishes. |
| | (*b*) Do using 3½″ × 5″ frames for partition walls and other places. | S.ft. | ... | ... | ... | 4,272 | 9 0 | 38,448 | +16,814 | +1,99,920 | |
| 16 | Providing and fixing T.W. doors with 3½″ × 5″ frame with 1½″ thick single leaf, fully panelled shutters, including copper oxidised heavy brass fitting, etc., | S.ft. | 2,381 | 7 0 | 16,667 | ... | ... | ... | ... | | |
| (16) | Providing and fixing teakwood special doors with 4″ × 6″ frames with ornamental architraves special fittings, fine polish, etc. | S.ft. | ... | ... | ... | 11,791 | 11 0 | 1,29,701 | ... | ... | |
| 17 | Providing and fixing T.W. windows with 3½″ × 5″ frame with 1½″ thick glazed shutters, opening outside with copper oxidised fittings, hinges, hooks etc., for inner windows. | S.ft. | 17,710 | 6 0 | 1,06,260 | ... | ... | ... | ... | ... | |
| (17) | Do with 3″ × 4″ frame work, with ornamental beading, etc. | S.ft. | ..... | ... | ... | 46,357 | 8 0 | 3,62,856 | .... | ... | |
| 18 | Providing and fixing T.W. windows as per specifications under item 17 with two coats of painting for outer faces and four coats of polish to the inside face for outer windows. | S.ft. | 16,669 | 5 0 | 83,345 | ... | ... | ... | +26,128 | +3,24,751 | As abov |

Comparative statement showing the Items of work, quantity and rate as provided in the estimates for Rs. 50 lakhs and Rs. 130 lakhs.

| Sl. No. in Ests. | Item of work | As per Rs. 50 lakhs estimate | | | | As per Rs. 130 lakhs estimate | | | Variations | | Remarks |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | | Unit | Quantity | Rate | Cost | Quantity | Rate | Cost | Quantity | Cost | |
| 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 |
| | | | | Rs. a. | Rs. | | Rs. a. | Rs. | | Rs. | |
| (18) | Providing and fixing special T.W. windows $3\frac{1}{2}'' \times 5''$ frame ornamental beading as per design and polishing. | S.ft. | ... | ... | ... | 15,150 | 10 0 | 1,51,500 | ... | ... | |
| 19 | Providing 1 : 2 : 4 R.C.C. lintel 10" thick above doors and windows with 3" stone facing three line dressed. | C.ft. | 11,399 | 4 0 | 45,596 | ... | ... | ... | ... | ... | |
| (19) | (*a*) Providing R.C.C. lintels above doors and windows and other openings with 1 : 2 : 4 R.C.C. | C.ft. | ... | ... | ... | 62,860 | 4 4 to 4 10 | 2,76,569 | Not comparable | +4,89,754 | |
| | (*b*) Providing R.C.C. bearing slab with 1 : 2 : 4 as per design. | C.ft. | ... | ... | ... | 40,035 | 3 8 to 3 14 | 1,47,011 | ... | ... | |
| | (*c*) Providing R.C.C. sills for windows | C.ft. | ... | ... | ... | 21,632 | 3 12 to 4 2 | 84,657 | ... | ... | |
| 20 | Providing 1 : 2 : 4 : R.C.C. lintels 10" thick without stone facing | C.ft. | 3,617 | 3 0 | 10,851 | ... | ... | ... | +1,09,511 | —4,89,754 | |
| (20) | (*a*) Providing stone veneering for R.C.C. lintels and roof slabs two line dressed and pulmani finished, and fixing the same in dowels fixed in lead. | S.ft. | ... | ... | ... | 6,025 | 4 0 | 24,100 | ... | ... | As against the original provision of R.C.C. lintels, dressed stone slab lintels have been adopted. Some R.C.C. lintels have been provided for. Additional projected lintels supported on stone brackets have been introduced as an architectural feature. R.C.C. bearing slabs below roof slab over walls have been an addition. The variations in cost and in quantities are due to the above and to the greater number of lintels involved, with the addition of the third floor. |
| | (*b*) Providing stone slab lintels 7' to 9' long, 9" projection with cymarecta curve in front, two line dressed. | S.ft. | ... | ... | ... | 1,083 | 7 0 | 7,581 | ... | ... | |

| | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | (c) Providing stone slab lintels 5″ thick 1½′ projection supported on stone brackets as per design. | S.ft. | ... | ... | ... | 1,564 | 4 0 to 4 2 | 6,283 | ... | ... | |
| 21 | Providing for sills B.S. slabs 10″ thick projecting 3″ beyond the wall, three line dressed for external faces including giving necessary slopes, drip moulding etc.. | ,, | 9,952 | 2 8 | 24,880 | ... | ... | ... | ... | ... | |
| (21) | (a) Providing and fixing in 1 : 3 C. M. stone slabs for sills of windows as per design. | ,, | ... | ... | ... | 17,694 | 5 0 to 6 8 | 1,00,797 | 7,742 | +75,917 | Variation in quantity due to greater number of sills and variation in cost due to above reason, and due to additional embellishments. |
| | (b) Providing and fixing two line dressed cut stone brackets below lintels in all floors. | Nos. | ... | ... | ... | 248 | 5 0 | 1,240 | ... | ... | |
| | (c) Providing and fixing two line dressed corbels in all floors. | Nos. | ... | ... | ... | 833 | 10 0 | 8,330 | Not comparable | +33,200 | Additional provisions with cut stone brackets, corbels, ornamental stone pillars, etc. |
| | (d) Providing ornamental stone pillars for windows in quadrangle. | Nos. | ... | ... | ... | 872 | 15 0 | 13,080 | ... | ... | |
| | (e) Providing dressed stone architraves for sides of windows in III floor. | R.ft. | ... | .. | ... | 1,055 | 10 0 | 10,550 | ... | ... | |
| 22 | R.C.C. roofing with 6″ slab as per design including centring, curing, etc., with ornamental ceiling. plastering with composite lime mortar, including floors at top. | Sq. | 2,706 | 180 0 | 4,87,080 | ... | ... | .. | ... | ... | |
| (22) | (a) 1 : 2 : 4 R.C.C. vibrated concrete 6″ thick. | ,, | ... | ... | ... | 2,614 | 190 0 to 210 0 | 5,29,645 | ... | ... | |
| | (b) 7″ thick ... | ,, | ... | ... | ... | 185 | 225 0 to 240 0 | 34,925 | ... | ... | |
| | (c) 8″ think ... | ,, | ... | ... | ... | 273 | 250 0 to 265 0 | 69,700 | +157 Sq. (after unit conversion) | +2,86,777 | Variations in quantities and in cost are due to the increased section of roofs, adoption of two-way reinforcements, and addition of one more floor. |
| | (d) 9″ thick ... | ,, | ... | ... | ... | 17 | 280 0 | 4,750 | ... | ... | |
| | (e) with two way reinforcements for larger spans with 1 : 2 : 4 R.C.C. as per design. | C.ft. | ... | ... | ... | 23,910 | 4 4 to 4 10 | 1,07,348 | ... | ... | |
| | (f) With two way reinforcement for larger spans with 1 : 1 : 2 concrete. | ,, | ... | ... | ... | 28,273 | 4 12 to 5 2 | 1,38,769 | ... | ... | |
| (23) | Providing weather proof course over 3rd floor with 1 : 2 quick lime and surki powder and average thickness 3-4″ covered over with two courses of flat tiles plastered at top and laid to required slope. | Sq. | ... | ... | ... | 1,065 | 60 0 | 63,900 | ... | ... | |

Comparative statement showing the Items of work, quantity and rate as provided in the estimates for Rs. 50 lakhs and Rs. 130 lakhs.

| Sl. No. in Ests. | Item of work | As per Rs. 50 lakhs estimate | | | | As per Rs. 130 lakhs estimate | | | Variations | | Remarks |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | | Unit | Quantity | Rate | Cost | Quantity | Rate | Cost | Quantity | Cost | |
| 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 |
| 23 | 1 : 2 : 4 R.C.C. roofing as per specification with 3" layer of surki concrete 2 courses of flat tiles plastered at top laid in proper slopes over II and III floors. | Sq. | —922 | Rs. a. 190 0 | Rs. a. 1,75,180 | ... | Rs. a. ... | Rs. a. ... | ... | Rs. a. ... | |
| 24 | 1 : 2 : 4 R.C.C. beams with necessary reinforcement as per design including plastering with mortar. | C.ft. | 87,943 | 5 0 | 4,39,715 | ... | ... | ... | ... | ... | |
| | 1 : 2 : 4 R.C.C. beams with necessary reinforcement as per design including plastering with mortar vibrated jelly concrete. | | | | | ... | ... | ... | ... | ... | |
| | (a) T beams 1 : 2 : 4 with 1½% to 3% reinforcement. | ,, | ... | ... | ... | 54,194 | 7 12 to 8 2 | 4,29,468 | ... | ... | |
| | (b) T beams 1 : 2 : 4 with 3% to 5% ... | ,, | ... | ... | ... | 57,630 | 8 8 to 8 14 | 4,96,348 | ... | ... | |
| | (c) R.C.C. rectangular beams 5% to 8% both in tension and compression for the restricted depths. | C.ft. | ... | ... | ... | 19,121 | 9 0 to 9 6 | 1,74,831 | +43,002 C.ft. | 6,60,932 | The variation in quantity is due to the increased sections and addition of the third floor, and the increase in cost is in addition to the above reason, due to richer concrete and heavier reinforcements. |
| 25 | Providing 1 : 2 : 4 R.C.C. staircase with necessary reinforcements, R. C. C. hand railing or grill work top finished with wooden railing top of steps of railing to be mosaic finished and remaining portions to be plastered with C.M. | C.ft. | 5,229 | 5 0 0 | 26,145 | ... | ... | ... | ... | ... | |

| | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| (25) | (*a*) Vibrated 1 : 2 : 4 concrete ... | C.ft. | ... | ... | ... | 12,496 | 5 12 to 6 2 | 73,970 | ... | ... | Increase in cost partly for additional heights of staircases involved with the introduction of the third floor, but mainly due to an extra stair case and heavy ornamental and mosaic finishes of steps and railings. |
| | (*b*) Providing ornamental railing 3′ high with polished ornamental hand rail in all floors. | C.ft. | ... | ... | ... | 2,924 | 10 0 | 29,240 | Not comparable | +1,03,665 | |
| | (*c*) Mosaic floor finish to R.C.C. steps in all floors. | Sqrs. | ... | ... | ... | 133 | 200 0 | 26,600 | ... | ... | |
| 26 | Providing and fixing ornamental M.S. railing 3′ high with T. W. ornamental hand railing with arrangements for fixing to floor slabs and two courses of approved paint. | R.ft. | 1,901 | 6 0 0 | 11,406 | ... | ... | ... | ... | ... | |
| (26) | (*a*) Dome portion, Assembly Hall, Council Hall and other portion of buildings. | R.ft. | ... | ... | ... | 1,951 | 15 0 | 29,365 | +1935 | +96,937 | Increase in quantity due to inadequate provision in Rs. 50 lakhs estimate, and increase in cost mainly due to the architectural embellishments. |
| 27 (27) | Providing and fixing 3 line dressed cutstone ornamental railing 3′ high, with base, balustrade, coping slab, etc., | R.ft. | 1,246 | 12 0 0 | 14,952 | 3,131 | 30 0 | 93,930 | ... | ... | |
| 28 (28) | Constructing parapet of Kotethene type, with 1½′ wide and 2½′ high base consisting of size stone in C.M. 1 : 6 including ornamental pilasters at every 10′ including pointing, etc. | R.ft. | 4,825 | 12 0 0 | 57,800 | 4,414 | 30 0 | 1,32,420 | —411 | +74,520 | Lesser length due to heavier provision in Rs. 50 lakhs estimate, and increase in cost owing to highly ornamental type of work proposed. |
| 29 (29) | Pointing to S.S. masonry walls and slabs with 1 : 3 C.M. after raking joints 1″ deep and nicely lined. | Sq. | 1,471 | 8 0 0 | 11,768 | 1,830 | 10 0 to 18 0 | 26,650 | +359 | +14,882 | Increases in quantity and in cost necessitated with the introduction of the third floor. |
| 30 | Plastering with chunam mortar 1 : 2 and 1″ thick to masonry including rounding of all corners with cement mortar rendered with lime. | Sq. | 3,088 | 9 0 0 | 27,792 | ... | ... | ... | Not comparable | ... | |
| (30) | Plastering with C.M. in 2-3 coats of ¾″ to 1¼″ thick including rounding at corners, for walls I coat 1 : 4; II coat 1 : 6 and final coat 1 : 1 : 8. | Sq. | ... | ... | ... | 5,215 | 22 0 to 25 0 | 1,21,837 | ... | ... | |
| | (*b*) for ceiling 1 : 4 and final 1 : 1 : 6 | Sq. | ... | ... | ... | 5,480 | 21 0 to 24 0 | 1,22,290 | ... | ... | |
| | (*c*) providing ornamental coving for ceiling. | R.ft. | ... | ... | ... | 64,802 | 0 14 to 1 1 | 62,204 | ... | ... | |
| | (*d*) providing ornamental beading to beams | R.ft. | ... | ... | ... | 48,879 | 0 8 | 24,441 | ... | ... | |
| | (*e*) coving for window openings | R.ft. | ... | ... | ... | 16,460 | 0 6 | 6,173 | ... | ... | |

Comparative statement showing the items of work, quantity and rate as provided in the estimates for Rs. 50 lakhs and Rs. 130 lakhs.

| Sl. No. in Ests. | Item of work | As per Rs. 50 lakhs estimate | | | | As per Rs. 130 lakhs estimate | | | Variations | | Remarks |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | | Unit | Quantity | Rate | Cost | Quantity | Rate | Cost | Quantity | Cost | |
| 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 |
| | | | | Rs. a. | Rs. | | Rs. a. | Rs. | | Rs. | |
| | (*f*) Ornamental freize work for the rear vestibule front foyar or central hall and in other places. | R.ft. | ... | ... | ... | 2,622 | 1 8 | 3,934 | ... | ... | |
| | (*g*) Providing ornamental panels and flower to ceiling. | Nos. | ... | ... | ... | 384 | 250 0 | 96,000 | ... | ... | |
| 31 | Plastering with shell lime plaster 1" thick over masonry including rounding of all corners with C.M. rendering with lime. | Sq. | 907 | 12 8 | 11,338 | ... | ... | ... | ... | ... | |
| (31) | Ornamental cement plastering finish with base and capital. | | | | | | | | | | |
| | 1. (*a*) Ordinary pillars with 9" capital and without base. | No. | ... | ... | ... | 120 | 100 0 | 12,000 | ... | ... | |
| | (*b*) Special pillars foyar hall and between toilet rooms. | Nos. | ... | ... | ... | 12 | 300 0 to 350 0 | 3,800 | ... | ... | Increase in cost partly due to third floor works but mainly due to change over of specifications from shell-lime and ordinary chunam plaster to (ornamental) cement plastering, and the heavy embellishments of ornamental bases and capitals. coving, beading and frieze works. |
| | (*c*) Verandah pillars of Central Hall ... | Nos. | ... | ... | ... | 30 | 750 0 | 22,500 | ... | ... | |
| | (*d, e, f*) Central Hall, vestibule and other portions. | ... | ... | ... | ... | 22 | 350 0 to 250 0 | 6,900 | Not comparable | +73,462 | |
| | 2. 1st & 2nd floors. | | | | | | | | | | |
| | (*a*) Foyar hall in front ... | Nos. | ... | ... | ... | 8 | 600 0 | 4,800 | ... | ... | |
| | (*b*) Between toilet room ... | Nos. | ... | ... | ... | 4 | 500 0 | 2,000 | ... | ... | |
| | (*c*) Verandah pillars of Assembly Hall. | Nos. | ... | ... | ... | 30 | 500 0 | 15,000 | ... | ... | |
| | (*d*) Pillars over cantilever brackets of Assembly Hall. | Nos. | ... | ... | ... | 32 | 200 0 | 6,400 | ... | ... | |
| | (*f*) and Vestibule in rear ... | Nos. | ... | ... | ... | 4 | 500 0 | 2,000 | ... | ... | |

| | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | (*g*) Council Hall exterior pillars ... | Nos. | ... | ... | ... | 8 | 250 0 | 2,000 | ... | ... | |
| | (*h*) Other portions ... | Nos. | ... | ... | ... | 6 | 500 0 | 3,000 | ... | ... | |
| | (*i*) Verandah pillars ... | Nos. | ... | ... | ... | 44 | 100 0 | 4,400 | ... | ... | |
| 32 | Acoustic plastering for the Upper House and Lower House inside. | Sq. | 278 | 15 0 | 4,170 | ... | ... | ... | —196 | +28,630 | The acoustic plastering has been changed over to teak-wood ornamental panelling. Even though quantity of work involved is shown to be less, the increase in cost is due to heavy rates with change in specification. |
| (32) | Providing special teak wood ornamental panelling to end walls of Assembly and Council halls. | Sq. | ... | .. | ... | 82 | 400 0 | 32,800 | ... | ... | |
| 33 | Construction of 1 : 2 : 4 : R.C.C. domes as per designs including centring, curing with three line dressed stone facing and ceiling plastering (heavily reinforced). | C.ft. | 53,261 | 7 0 | 3,72,827 | ... | ... | ... | ... | ... | |
| (33) | Central Dome. | | | | | | | | | | |
| | 1. 1 : 1 : 2 R.C.C. wall supporting the dome. | C.ft. | ... | ... | ... | 21,764 | 15 0 | 3,26,460 | ... | ... | |
| | 2. 1 : 1 : 2 R.C.C. Dome on top ... | Sq. | ... | ... | ... | 3,776 | 25 0 | 94,400 | ... | ... | |
| | 3. Cutstone veneering for walls with archl., features. | S.ft. | ... | ... | ... | 9,000 | 12 0 | 1,08,000 | ... | ... | |
| | 4. do for domes ... | S.ft. | ... | ... | ... | 7,500 | 10 0 | 75,000 | ... | ... | |
| | 5. Special plastering to inside of dome. | Sq. | ... | ... | ... | 144 | 30 0 | 4,320 | ... | ... | The heavy increase in cost is due to the increase in the height of the main dome necessitated with the addition of the third floor, and the change over to cut stone veneering, pediments, kapothas, and heavy architectural features. |
| | 6. Providing R.C.C. Kapotha cornice including slab veneering as per design. | S.ft. | ... | ... | ... | 1,920 | 10 0 | 19,200 | Not comparable | 4,54,053 | |
| | 7. Other ornamental features, finial, gold plating, etc. | L.S. | ... | ... | ... | ... | ... | 30,000 | ... | ... | |
| | 8. Providing ornamental ventilators and other openings in dome portions. | S.ft. | ... | ... | ... | 700 | 15 0 | 10,500 | ... | ... | |
| | 9. Other items of work for which details have to be worked out. | L.S. | ... | ... | ... | ... | ... | 25,000 | ... | ... | |
| | 10. R.C.C. Terrace at RL 200·50 and other levels including beams. | Sq. | ... | ... | ... | 30 | 800 0 | 24,000 | ... | ... | |
| | (*b*) Constructing other smaller domes— | | | | | | | | | | |
| | 1. Over end facades ... | ... | ... | ... | ... | 4 | 20,000 0 | 80,000 | ... | ... | |

Comparative statement showing the Items of work, quantity and rate as provided in the estimates for Rs. 50 lakhs and Rs. 130 lakhs.

| Sl. No. in Ests. | Item of work | As per Rs. 50 lakhs estimate | | | | As per Rs. 130 lakhs estimate | | | Variations | | Remarks |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | | Unit | Quantity | Rate | Cost | Quantity | Rate | Cost | Quantity | Cost | |
| 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 |
| | | | | Rs. a. p. | Rs. | | Rs. a. | Rs. | | Rs. | |
| | 2. Domes by the sides of Central Dome in front. | ... | ... | ... | ... | 2 | 10,000 | 20,000 | ... | ... | |
| | 3. Providing pediments and other features in S-entrance and other features over rear vestibule. | L.S. | ... | ... | ... | ... | ... | 10,000 | ... | ... | |
| 34 (34) | Providing, hoisting and fixing steel trusses including two coats of paint for Upper and Lower Houses. | Tons | 90 | 800 0 0 | 72,000 | 130 | 950 0 0 | 1,23,500 | +40 | +61,500 | The variations in quantity and in cost necessitated by heavier sections of steel work, with double layer of roof. |
| (34) | (*b*) Providing roller foundation bolts etc., | L.S. | ... | ... | ... | ... | ... | 10,000 | | | |
| 35 | Providing roofing for the Upper and Lower Houses with corrugated asbestos sheets with necessary ridge pieces—bolts etc., | Sq. | 325·8 | 100 0 0 | 32,580 | ... | ... | ... | 3·2 | +40,220 | The increase in cost is due to adoption of two tiers of roof, not originally contemplated. |
| (35) | Providing zinc sheets and asbestos sheets etc. including painting asbestos sheets on top. | Sq. | ... | ... | ... | 329 | 200 0 0 | 65,800 | | | |
| | *a*) Providing drainage arrangements for the above roofing. | S.ft. | ... | ... | ... | 875 | 8 0 0 | 7,000 | ... | ... | |
| 36 | Providing and fixing ceiling for the roof of auditorium to the required shape with sound absorbing boards including necessary finish, etc. | Sq. | 470·3 | 100 0 0 | 47,030 | 279 | 150 0 0 | 41,850 | 114·3 | +6,320 | Excessive provision in Rs. 50 lakhs estimate, and increase in cost due to costlier type of ceiling. |
| (36) | Providing and fixing ceiling for the Central hall in G.F. for the end bays. | Sq. | ... | ... | ... | 77 | 150 0 0 | 11,500 | | | |
| 37 | (*a*) Providing main entrance steps from G.F. to F.F. with landings between R.C.C. 1 : 2 : 4 beams for supporting steps. | C.ft. | 2622 | 4 0 0 | 10,488 | ... | ... | ... | ... | ... | |

| | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | (*b*) 3 line dressed burnt stone slabs of 15" tread and 6" rise set in C.M. | S.ft. | 6323 | 2 8 | 15,808 | ... | ... | ... | | | The heavy excess is on account of the introduction of the grand flight of steps as an architectural feature, and the introduction of the cycle stand underneath the same. |
| (37) | Do and providing cycle stand below (as per separate detailed estimate). | ... | ... | ... | ... | .. | ... | 1,55,000 | Unit difference | +1,36,885 | |
| (37) | Steps for other entrances ... | S.ft. | ... | ... | ... | 909 | 9 0 | 8,181 | | | |
| 38 | Providing and fixing T.W. ornamental doors with 8" × 12" frame finished to the required shape and carvings and 3" thick battened shutters with carvings as per design finished with heavy copper oxidised fitting. | S.ft. | 798 | 15 0 | 11,970 | ... | ... | ... | +6,964 | +59,650 | Variations in quantities and in cost due to increased work of special kinds of doors, windows heavier ornamental work and embellishments. |
| (38) | Do doors and windows .. | ... | ... | ... | ... | 7,162 | 10 0 | 71,620 | | | |
| 39 | Providing and fixing R.C.C. perforated ventilators 1 : 2 : 4. | S.ft. | 192 | 1 12 | 366 | ... | ... | ... | +5,208 | 26,634 | |
| (39) | (*a*) Do including ornamental design. | S.ft. | ... | ... | ... | 5,400 | 5 0 | 27,000 | | | |
| 40 | Providing and fixing T.W. ventilators with 3" × 4" frame with 1½" thick glazed shutters. | S.ft. | 440 | 4 8 | 1,980 | .. | ... | ... | | | |
| (40) | Do with R.C.C. or steel grill work in basement floor. | S.ft. | ... | ... | ... | 162 | 12 0 | 1,944 | ... | +16,804 | |
| | (*a*) without grill work ... | S.ft. | ... | ... | ... | 962 | 8 0 | 7,696 | | | |
| | (*b*) Providing dressed slab ornamental border slabs for ventilators including fixing. | R.ft | ... | ... | ... | 1,016 | 9 0 | 9,144 | | 1,03,088 | |
| 41 | Casting 1 : 2 : 4 R C.C. chajja in continuation of lintel with necessary reinforcements as per design including plastering at top and stone finishing, etc., | S.ft. | 7,943 | 2 0 | 15,886 | 6,629 | 2 8 to 2 14 | 18,248 ... | 2346 | 18,939 | Increase in quantity and in cost necessitated with the introduction of the third floor. |
| 41) | *a*, *b*, *c*, *d*, *e*, as above | | | | | | | | | | |
| | (*f*) 6' chajja for verandah in III floor | S.ft. | ... | ... | ... | 3,660 | 3 0 | 10,980 | | | |
| | (*g*) Providing ornamental parapet as per design over chajjas over windows. | R.ft. | ... | ... | ... | 4,926 | 5 0 | 24,630 | ... | 31,130 | Additional cost due to embellishment, not originally contemplated. |
| | (*h*) Providing ornamental pediment over windows in III floor. | Nos. | ... | ... | ... | 65 | 100 0 | 6,500 | | | |
| 42 | Constructing R.C.C. gallery in the sides of Lower House. | | | | | | | | | | |
| | (*a*) Over brackets 1 : 2 : 4 R.C.C. roofing, as per design with stone finishing. | C.ft. | 1,620 | 4 0 | 6,480 | ... | ... | ... | | | |
| | (*b*) 1 : 2 : 4 R.C.C. roofing over brackets 6" thick with ceiling plastering including flooring with red ochre. | Sq. | 1,272 | 190 0 | 24,168 | ... | ... | ... | ... | ... | *Vide item 59.* |
| | (*c*) 1 : 2 ; 4 R.C.C. walls 4½" thick with opening as per drawing including C.M. pointing and stone finishing, etc. | S.ft. | 13,492 | 1 12 | 23,611 | ... | ... | ... | | | |
| (42) | Providing R.C.C. gallery in Assembly Hall | | | | | | | | | | |
| | (*a*) 1 : 1 : 2 R.C.C. columns to support in gallery. | C.ft. | ... | ... | ... | 1,186 | 8 0 | 9,488 | ... | ... | 9,488 |

Comparative statement showing the Items of work, quantity and rate as provided in the estimates for Rs. 50 lakhs and Rs. 130 lakhs.

| Sl. No. in Ests. | Item of work | As per Rs. 50 lakhs estimate | | | | As per Rs. 130 lakhs estimate | | | Variations | | Remarks |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | | Unit | Quantity | Rate | Cost | Quantity | Rate | Cost | Quantity | Rate | |
| 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 |
| | | | | Rs. a. p. | Rs. | | Rs. a. p. | Rs. | | Rs. | |
| | (*b*) 1 : 1 : 2 R.C C. beams to support roof | C.ft. | ... | ... | ... | 1,186 | 8 0 0 | 9,488 | ... | ... | |
| | (*c*) 6″ thick R.C.C. stepped slab as per design. | ... | ... | ... | ... | 4,951 | 8 0 0 | 39,608 | ... | ... | |
| | (*d*) Providing T. W. frame work and sound absorbing ceiling boards below gallery. | Sq. | ... | ... | ... | 175 | 225 0 0 | 39,375 | ... | ... | *Vide* item 59 |
| | (*e*) Providing ornamental railing for gallery. | R.ft. | ... | ... | ... | 299 | 15 0 0 | 4,485 | ... | ... | |
| 43 | (43) Providing spiral stair case in dome. | L.S. | ... | ... | 4,000 | ... | ... | 5,000 | L.S. | +1,000 | Additional L. S. provision. |
| 44 | Flooring with 1 : 2 : 4 cement concrete 1½″ thick over a bed of 6″ concrete (lime) plastered over with cement plaster ½″ 1 : 3 and top finished with red oxide cut to required pattern including wax polishing. | Sq. | 626·20 | 50 0 0 | 31,310 | ... | ... | ... | ... | ... | Additional flooring area necessitated by the introduction of the third floor—Increase in cost is partly due to above, but mainly due to change over of pattern of flooring, and increase of allied works as terrazo, dadoing etc., (elaborated in separate note.) |
| 52 | (44) Providing dressed slab granite flooring 3″ thick set in C. M. 1 : 3 over a base of 4½″ 1 : 4 : 8 C.C. including pointing etc., | Sq. | 45·7 | 120 0 0 | 5,244 | 257 | 165 0 0 | 42,405 | ... | ... | |
| | (*b*) Do without bed concrete. | Sq. | ... | ... | ... | 88 | 115 0 0 | 10,120 | (Item 44 to 52) + 2,006 | 5,06,223 | |
| 45 | Do as item 44 without lime concrete. | Sq. | 980·1 | 30 0 0 | 29,403 | ... | ... | ... | | ... | |
| (45) | Providing flooring with cement tiles of different colours set in CM ¾″ thick 1 : 2 : 4 cement concrete laid over a base of 4½″ 1 : 4 : 8 C. C. including machine polishing. | Sq. | ... | ... | ... | 321 | 170 0 0 | 54,570 | ... | ... | |
| (46) | Do without base concrete. | Sq. | ... | ... | ... | 1,465 | 130 0 0 | 1,90,450 | ... | ... | |
| 46 | Mosaic flooring prepared to the required pattern and colour laid over a bed of C.C. 1 : 2 : 4, 6″ thick including polishing. | Sq. | 231·8 | 150 0 0 | 34,800 | ... | ... | ... | ... | ... | |

| | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 47 | Do over 1½" cement concrete. | Sq. | 317 | 120 | 0 | 0 | 38,040 | ... | ... | ... | ... | ... |
| (47) | (*a*) Providing relief tiles of approved pattern and colour set in CM ¾" 1 : 2 : 4 concrete including pointing and polishing. | Sq. | ... | ... | | | ... | 1,170 | 165 | 0 | 0 | 1,93,050 | ... | ... |
| | (*b*) With coloured cement carpet tiles. | Sq. | ... | ... | | | ... | 32 | 180 | 0 | 0 | 5,760 | ... | ... |
| 48 | Flooring and dadoing with white glazed tiles and pointing with plaster of paris over a bed of 1½" C.C. | Sq. | 132·8 | 200 | 0 | 0 | 26,560 | ... | ... | | | ... | ... | ... |
| (48) | Providing mosaic tiles of approved design and colour set in cement mortar ¾" thick over 1½" thick 1 : 2 : 4 cement concrete over a base of 4½" 1 : 4 : 8 including pointing and polishing. | Sq. | ... | ... | | | ... | 329 | 245 | 0 | 0 | 80,605 | ... | ... |
| (49) | Do without base concrete. | Sq. | ... | ... | | | ... | 962 | 205 | 0 | 0 | 1,97,210 | ... | ... |
| 49 | Flooring with marble over a bed of 6" thick C.C. 1 : 2 : 4 including setting in CM and polishing. | Sq. | 121·60 | 600 | 0 | 0 | 72,960 | ... | ... | | | ... | ... | ... |
| 50 | Do over a bed of 1½" thick C.C. | Sq. | 139·4 | 550 | 0 | 0 | 76,670 | ... | ... | | | ... | ... | ... |
| (50) | Flooring with marble set in cement mortar over 1½" thick 1 : 4 : 8 concrete bed including pointing and machine polishing. | L.S. | ... | ... | | | ... | ... | ... | | | 5,000 | ... | ... |
| | (*b*) Providing warehouse flooring in basement floor. | Sq. | ... | ... | | | ... | 195 | 110 | 0 | 0 | 21,450 | ... | ... |
| 51 | Flooring with vitreous clay tiles to the required pattern and colour laid ever a bed of 1½" thick 1 : 2 : 4. | Sq. | 220·7 | 40 | 0 | 0 | 8,828 | ... | ... | | | ... | ... | ... |
| (51) | Providing skirting with cement tiles in different colours and designs to match with flooring in the verandahs. | R.ft. | ... | ... | | | ... | 5,959 | 2 | 0 | 0 | 11,918 | ... | ... |
| (51) | (*b*) Do with mosaic tiles. | L.S. | ... | ... | | | ... | | ... | | | 10,000 | ... | ... |
| (52) | Providing mosaic dadoing wherever necessary. | L.S. | ... | ... | | | ... | | ... | | | 7,500 | ... | ... |

Comparative statement showing the items of work, quantity and rate as provided in the estimates for Rs. 50 lakhs and Rs. 130 lakhs.

| Sl. No. in Ests. | Item of work | As per Rs. 50 lakhs estimate | | | | As per Rs. 130 lakhs estimate | | | Variations | | Remarks |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | | Unit | Quantity | Rate | Cost | Quantity | Rate | Cost | Quantity | Cost | |
| 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 |
| | | | | Rs. a. p. | Rs. | | Rs. | Rs. | | Rs. | |
| 53 | Providing three line dressed cutstone cornice 2′ high as per design. | R.ft. | 5,134 | 8 0 0 | 41,072 | ... | ... | ... | ... | ... | |
| (53) | Providing as per design three line dressed cutstone work for the architectural features of the exterior face of the building at different levels with R.C.C. backing. | R.ft. | ... | ... | ... | ... | ... | ... | ... | ... | |
| | (*a*) Front face finished with cymarecta 21″ high and 18″ wide at 104·00 | R.ft. | ... | ... | ... | 254 | 20 0 | 5,080 | ... | ... | |
| | (*b*) Front face finished with cymarecta 20″ high 12″ wide at 116·00 level. | R.ft. | ... | ... | ... | 1,283 | 18 0 | 22,894 | -(273) | +35,861 | Excess in cost due to increase in quality of work, towards architectural effects. |
| | (*c*) Front face finished with cymarecta 18″ high and 18″ wide at 127.0 level. | R.ft. | ... | ... | ... | 1,293 | 18 0 | 23,274 | ... | ... | |
| | (*d*) Front face finished with cymarecta 16″ high and 12″ wide at 130·5. | R.ft. | ... | ... | ... | 1,075 | 15 0 | 16,125 | ... | ... | |
| | (*e*) Front face finished with cymarecta at 3rd floor level. | ... | ... | ... | ... | 956 | 10 0 | 9,560 | ... | ... | |
| 54 | Casting R.C.C. capota cornice with ornamental brackets at bottom in continuation of beams giving necessary shape and stone finishing with decoration as per design. | R.ft. | 604 | 10 0 0 | 6,040 | ... | ... | ... | ... | ... | |
| (54) | Providing R C C capota cornice as per design over main entrance with stone finish. | C.ft. | ... | ... | ... | 1,732 | 15 0 | 25,980 | Unit difference | +45,720 | Excess in cost as a result of ornamental parapets, and increased quality in work, towards embellishments. |
| | (*b*) Providing and fixing dressed stone brackets as per design. | Nos. | ... | ... | ... | 466 | 25 0 | 11,650 | ... | ... | |
| | (*c*) Ornamental R.C.C. parapet over chajjas. | R.ft. | ... | ... | ... | 471 | 30 0 | 14,130 | ... | ... | |
| 55 | White washing two coats ... ... | Sqr. | 1,544 | 0 12 0 | 1,158 | ... | ... | ... | ... | ... | |
| (55) | White washing four coats with shell lime | Sqr. | .. | ... | ... | 8,470 | 2 to | 16,940 | ... | ... | |
| 56 | Distemper wash two coats ... ... | Sqr. | 1,544 | 2 0 0 | 3,088 | ... | 2 6 | ... | +,6682 | +25,714 | Excess in quantity, due to |

| | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| (56) | (*a*) with snowcem finish and washable distemper. | Sqr. | ... | ... | ... | 1,128 | 15 0 0 | 17,920 | ... | ... | inadequate provision in Rs. 50 lakhs estimate and on account of introduction of III floor. Excess in cost due to above reasons, and mainly to the costlier type of distemper washes. |
| (57) | (*b*) with oil paints ... ... ... | Sqr. | ... | ... | ... | 450 | 20 0 0 | 9,000 | | | |
| 57 | Painting inside the auditorium with special paints. | Sqr | 278 | 50 0 | 13,900 | ... | ... | ... | | | |
| 58 | Constructing R.C.C. balcony in the Central Lobby in II floor. | L.S. | ... | ... | ... | ... | ... | 5,000 | | | |
| | (*a*) 1 : 2 : 4 R.C.C. Cantilever 6″ thick including ceiling, plastering and mosaic flooring. | Sqr. | 2 | 300 0 | 600 | ... | ... | ... | | | |
| | (*b*) Constructing curved R.C.C. railing 1 : 2 . 4 as per design including cement plastering and stone finish. | Rft. | 68 | 5 0 | 340 | ... | ... | .. | Unit difference | +1,09,060 | Excess in cost due to introduction of outer facades, towards architectural features. |
| (58) | Providing balcony with outer facades ... | | ... | ... | ... | ... | ... | ... | | | |
| | (*a*) Central portion ... ... ... | Nos. | ... | ... | ... | 10 | 3,000 | 30,000 | | | |
| | (*b*) wings ... ... ... ... | Nos. | ... | ... | ... | 16 | 5,00 | 80,000 | | | |
| 59 | (*a*) Constructing gallery in the lower and upper houses auditorium 6″ thick R.C.C. 1 : 2 : 4 steps including flooring with vitreous clay tiles. | C.ft. | 6,979 | 8 0 | 55,832 | ... | ... | ... | | | |
| | (*b*) Providing and fixing ornamental M.S. railing 3′ high with T.W. ornamental hand railings as per design and fixing the same with floor slabs and two coats of approved paint. | R.ft. | 491 | 5 0 0 | 2,455 | ... | ... | ... | ... | ... | Considered along with item 42. |
| (59) | Constructing R.C.C. gallery in Council Hall. | C.ft. | ... | ... | ... | ... | ... | ... | | | |
| | (*a*) 1 : 1 : 2 R.C.C. col. for supporting the gallery. | C.ft. | ... | ... | ... | 664 | 9 0 | 5,976 | | | |
| | (*b*) Constructing R.C.C. beam with top and bottom reinforcements to support the slab of the gallery and for window bracing. | C.ft. | ... | ... | ... | 2,200 | 8 0 | 17,600 | | | |
| | (*c*) Providing 5″ thick R.C.C. stepped slab with R.C.C. 1 : 2 : 4 as per design. | Sq. | ... | ... | ... | 34 | 175 0 | 5,950 | | | |

Comparative statement showing the Items of work, quantity and rate as provided in the estimates for Rs. 50 lakhs and Rs. 130 lakhs.

| Sl. No. in Ests. | Item of work | As per Rs. 50 lakhs estimate | | | | As per Rs. 130 lakhs estimate | | | Variations | | Remarks |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | | Unit | Quantity | Rate | Cost | Quantity | Rate | Cost | Quantity | Cost | |
| 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 |
| | | | | Rs. | R. | | Rs. | Rs. | | Rs. | |
| | (*d*) Providing ceiling boards of sound absorbing material below stepped gallery, and over Rajpramukh's seat. | Sqr. | ... | ... | ... | 52 | 150 0 | 7,800 | ... | ... | |
| | (*e*) Providing ornamental railing for the gallery. | R.ft. | ... | ... | ... | 200 | 15 0 | 3,000 | ... | | |
| | (*f*) Providing ornamental plastering to the interior of side walls of council hall above visitors gallery. | Sqr. | ... | ... | ... | 30 | 60 0 | 1,800 | Not comparable | +31,856 | |
| (59) | (*g*) Ornamental plastering with colour treatment for the architectural panels in the exterior of the N. walls of upper house. | Sqr. | ... | ... | ... | 37 | 100 0 | 3,700 | ... | ... | Items 42 and 59 considered together. Excess in cost due to additional provisions, and ornamental works. |
| | (*h*) Providing ornamental cornice at the edge of the sloping roof on the N. side. | S.ft. | ... | ... | ... | 108 | 15 0 | 1,620 | ... | ... | |
| | (*i*) Providing ornamental beading at the edge of the cantilever slab of visitors gallery. | S.ft. | ... | ... | ... | 200 | 15 0 | 3,000 | ... | ... | |
| | (*j*) Providing wooden platform with railing for Secretaries and Press. | L.S. | ... | ... | ... | ... | ... | 1,000 | ... | ... | |
| 60 | Constructing of Speaker's seat in the upper and lower houses. | | | | | | | | | | |
| (60) | R.C.C. 1 : 2 : 4 6″ thick including flooring with vitreous clay tiles | Sqr. | 5·1 | 100 0 | 510 | ... | ... | 5,000 | Not comparable | +4,490 | Excess in cost towards embellishments as vitreous clay tile flooring. |
| 61 | Providing Teak wood flooring to auditorium upper and lower houses. | Sqr. | 197·8 | 150 0 | 29,770 | 221 | 350 0 | 77,350 | +131 | +96,180 | Excess in quantity due to additional item of teak wood walling and increase in cost due to above cause and due to extra rate. |
| (61) | Providing T. W. walling as per design... | Sqr. | .... | ... | ... | 108 | 450 0 | 48,600 | | | |
| 62 | Ornamental cutstone brackets 3 line dressed to the col. of G. F. supporting lower house and auditorium pillars. | C.ft. | 1,620 | 10 0 | 16,200 | ... | ... | ... | Unit difference | —6,200 | Lesser cost due to change over in type of work from cutstone brackets to R.C.C. cantilevers. |

| | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| (62) | Ornamental finish to cantilever brackets and entemblatures on the side of assembly and council halls. | Nos. | ... | ... | ... | 50 | 200 0 | 10,000 | ... | ... | |
| 63 | Facing 3 line dressed cutstone slab 3" thick with ornamentation as per design for entemblatures. | R.ft. | 5,000 | 15 0 | 75,000 | ... | ... | ... | ... | ... | |
| (63) | Providing dressed stone veneering slabs to entablatures as per design at different levels. | R.ft. | ... | ... | ... | ... | | ... | ... | ... | |
| | (a) G. F. at 127·00 level ... | R.ft. | ... | ... | ... | 2,313 | 40 0 | 92,520 | | | |
| | (b) ,, at 144·00 level ... | R.ft. | ... | ... | ... | 1,250 | 22 0 | 27,500 | | | |
| | (c) ,, at 160·00 level ... | R.ft. | ... | ... | ... | 1,250 | 50 0 | 62,500 | +1,747 | +1,99,960 | Excess in quantity and in cost as a result of stone veneering work to entablatures of designs towards architectural effect. |
| | (d) ,, third floor . | R.ft. | ... | ... | ... | 1,164 | 40 0 | 46,560 | | | |
| | (e) Eastern portico G. F. ... | R.ft. | ... | ... | ... | 132 | 60 0 | 7,920 | ... | ... | |
| | Second floor | | | | | 144 | 70 0 | 10,080 | ... | ... | |
| | (f) N· portico G. F. ... | R.ft. | ... | ... | ... | 91 | 60 0 | 5,460 | ... | ... | |
| | Top floor ... | R.ft. | ... | ... | ... | 91 | 70 0 | 6,370 | ... | .. | |
| | (g) Western portico G. F. ... | R.ft. | ... | ... | ... | 91 | 55 0 | 5,005 | ... | ... | |
| | Top floor .. | R.ft· | ... | ... | ... | 91 | 65 0 | 5,915 | ... | ... | |
| | (h) Southern entrance B. floor ... | R.ft. | ... | ... | ... | 36 | 25 0 | 900 | ... | ... | |
| | G. F. ... | R.ft. | ... | ... | . . | 47 | 40 0 | 1,880 | ... | ... | |
| | S. F. ... | R.ft. | ... | ... | ... | 47 | 50 0 | 2,350 | ... | ... | |
| 64 | Providing and fixing polished Turuvekere stone slab to the architraves of main doors. | S.ft. | 1,004 | 10 0 | 10,040 | ... | ... | ... | ... | ... | |
| (64) | Providing ornamental architraves to main entrances : | R.ft. | ... | ... | ... | 300 | 30 0 | 9,000 | ... | ... | |
| | (a) with stone slab of approved design. | | ... | ... | ... | 1,009 | 10 0 | 10,090 | ... | ... | |
| | (b) with wood of approved design ... | R.ft. | ... | ... | ... | 806 | 20 0 | 16,120 | ... | ... | |
| | (c) With plaster ... ... | R.ft. | ... | ... | ... | 1,200 | 2 0 | 2,400 | ... | ... | |
| | (d) Ornamental panelling in front of portico in polished stone. | L.S. | ... | ... | ... | ... | ... | 10,000 | Unit difference | +39,570 | Excess due to additional embellishments. |
| | (e) for N. Portico ... ... | L.S. | ... | ... | ... | ... | ... | 2,000 | ... | ... | |
| 65 | Providing statue in Central lobby ... | L.S. | ... | ... | 10,000 | ... | ... | 20,000 | Lumpsum | +10,000 | Increased provision, as additional embellishments. |
| (65) 66 | Flooring and roofing for the cellar floor and other items—details to be worked out. | L.S. | ... | ... | 75,000 | ... | ... | ... | ... | ... | |
| (66) | Providing strong room and treasury in B. Floor and also Power house. | | ... | ... | ... | ... | ... | ... | ... | ... | |
| | (a) R.C.C. burglar-proof wall ... | C.ft. | ... | ... | ... | 4,750 | 4 8 | 21,375 | ... | —38,525 | Lesser provisions made in the 130 lakhs estimate. |
| | (b) do flooring ... ... | Sqr. | ... | ... | ... | 32 | 300 0 | 9,600 | ... | ... | |
| | (c) Steel doors, windows and ventilators with exhaust fans, etc. | L.S. | ... | ... | ... | ... | ... | 5,000 | ... | ... | |
| | (d) Construction of guard room ... | L.S. | ... | ... | ... | ... | ... | 500 | ... | ... | |

Comparative statement showing the items of work, quantity and rate as provided in the estimates for Rs. 50 lakhs and Rs. 130 lakhs.

| Sl. No. in Ests. | Item of work | As per Rs. 50 lakhs estimate | | | | As per Rs. 130 lakhs estimate | | | Variations | | Remarks |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | | Unit | Quantity | Rate | Cost | Quantity | Rate | Cost | Quantity | Cost | |
| 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 |
| | | | | Rs. | Rs. | | Rs. | Rs. | | Rs. | |
| | (e) Constructing retaining wall and steps with cutstone parapet etc., at S.E. corner of basement floor. | L.S. | ... | ... | ... | ... | ... | 7,710 | ... | +7,710 | Introduced as a new item, necessitated by earth filling in front. |
| 67 | Establishment (permanent and temporary) | L.S. | ... | ... | 1,00,000 | ... | ... | ... | ... | ... | |
| (68) | Establishment (permanent and temporary) | L.S. | ... | ... | ... | ... | ... | 1,00,000 | ... | ... | |
| (67) | Architecture to dome, main doors (etc.), | | | | | | | | | | |
| | (a) N. Portico veneering and finishing work. | L.S. | ... | ... | ... | ... | ... | 5,000 | ... | ... | |
| | (b) Providing Ornamental cutstone ventilators in outer facades | S.ft. | ... | ... | ... | 1,860 | 20 0 | 37,200 | ... | +76,200 | Additional work towards architectural features. |
| | (c) Ornamental finishing to openings in the E and W entrances. | S.ft. | ... | ... | ... | 800 | 5 0 | 4,000 | ... | ... | |
| | (d) Finish to lift walls with necessary features. | Nos. | ... | ... | ... | 5 | 2,000 0 | 10,000 | ... | ... | |
| | (e) Pulmani finish to exterior face and other works. | L.S. | ... | ... | ... | ... | ... | 20,000 | ... | ... | |
| 68 | Levelling the ground ... ... | L.S | ... | ... | 20,000 | ... | ... | 1,00,000 | ... | +80,000 | Inadequate provision in Rs. 50 lakhs estimate. |
| 69 | Unforeseen and rounding ... | L.S. | ... | ... | 14,414 | ... | ... | 31,821 | ... | +17,407 | Do |
| (69) 70 | Temporary offices etc., ... ... | L.S. | ... | ... | 50,000 | ... | ... | ... | ... | ... | |

Note: Figures within brackets in Column (1) refer to Rs. 130 lakhs estimate.

Statement showing certain items of work with reasons for large variations in quantity and cost between the Rs. 50 lakhs estimate and Rs. 130 lakhs estimate .

| Sl. No. | Sl. No. of items in estimates | Item | Variation in Qantity | Cost | Reasons for variation | | Design | Remarks |
|---|---|---|---|---|---|---|---|---|
| | | | | | Architectural features and embellishment | Change in type of work | | |
| 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 |
| | | | | Rupees. | | | | |
| 1 | 2,3 | 1 : 3 : 6 concrete for foundation and R.C.C. raft for foundation. | — 7,569 Cft. | + 40.444 | ... | ... | ... | Increased quantity under raft, and decreased quantity in ordinary foundation. |
| 2 | 4 | R.C.C. (raft) 1 : 1½ : 3 for heavily loaded columns with heavy reinforcements. | + 34,969 Cft. | 1,40,936 | 1,40,936 | ... | 1,40,936 | Increased section, with heavier reinforcement and richer concrete, necessitated with the introduction of the III floor, and consequent increase in height of Domes, wider balconies etc. |
| 3 | 9,10,11 | Providing and fixing cutstone pillars ... | Units differ not comparable | 1,70,149 | 1,70,149 | 1,70,149 | ... | Change from masonry to cutstone work towards architectural effect and embellishments. |
| 4 | 12 | Providing 1 : 2 : 4 R.C.C. circular columns with 3½-6% steel. | + 19,342 C.ft. | 2,13,928 | 2,13,928 | ... | 2,13,928 | Increased section with heavier reinforcements and richer concrete. Some of the columns to support wider balconies and additional columns towards architectural features. |
| 5 | 13 | Size stone masonry in C.M. for superstructure. | — 9,282 C.ft. | 2,44,799 | 2,44,799 | 2,44,799 | ... | General change in type of work under several classification, towards superior quality of stone facing. |
| 6 | 15,16 | Providing T.W. doors and special doors. | + 16,814 R.ft. | 1,99,920 | 1,99,920 | ... | ... | Change in specification and increase in numbers necessitated by the introduction of the third floor. |
| 7 | 17,18 | Providing T.W. windows and special windows. | + 26,128 S.ft. | 3,24,751 | 3,24,751 | ... | ... | Do |
| 8 | 19,20 | Providing 1 : 2 : 4 R.C.C. lintel over doors and windows and stone veneering. | + 1,09,511 C.ft. | 4,89,754 | 3,44,743 | 1,45,011 (Bearing slabs) | ... | Stone facing to R.C.C. lintels, increased number of lintels; and additional provision for bearing slab under beams, which had been a omission in the 50 lakhs estimate, costing 1,45,011. |
| 9 | 21 | Providing burnt stone slab for cills with stone brackets, corbels, etc. | + 7,742 S.ft. | 1,09,117 | 1,09,117 | ... | ... | Additional architectural features such as corbels, brackets etc., and inadequate provision in 50 lakhs estimate. |

Statement showing certain items of work with reasons for large variations in quantity and cost between the Rs. 50 lakhs estimate and Rs. 130 lakhs estimate—*concld.*

| Sl. No. | Sl. No. of items in estimates | Item | Variation in Quantity | Cost | Reasons for variation | | Design | Remarks |
|---|---|---|---|---|---|---|---|---|
| | | | | | Architectural features & embellishments | Change in type of work | | |
| 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 |
| | | | | Rs. | | | | |
| 10 | 22,23 | Providing R.C.C. roofing with necessary reinforcements and water proofing. | + 157 Sq. | + 2,86,777 | 2,25,000 (Third floor roof) | ... | 61,777 | Increase in section of roof adoption of two way reinforcements and addition of III floor. |
| 11 | 24 | Providing 1 : 2 : 4 R.C.C. for beams ... | + 43,002 C.ft. | + 6,60,000 | 2,00,000 | ... | 4,60,000 | Increase section with heavy reinforcements and richer concrete and addition of III floor. |
| 12 | 25 | Providing R.C.C. stair case. ... | (Units differ, not comparable). | + 1,03,665 | (Third floor) 55,840 47,825 | (Embellishments) (Third floor and additional stair case) | | Embellishment like mosaic steps and ornamental railing, etc., extension up to III floor and one additional stair case. |
| 13 | 26,27 | Providing and fixing ornamental railing in domes, assembly and council halls. | + 1,935 R ft. | + 96,937 | 96,937 | ... | ... | Additional embellishments and inadequate provision in 50 lakhs estimate. |
| 14 | 28 | Providing and fixing parapet of Kotethene type. | — 411 R.ft. | 74,520 | 74,520 | 74,520 | ... | Additional architectural feature and change over from size stone masonry to cut stone. |
| 15 | 30 | Plastering with cement mortar in three coats for ceiling and walls. | (Not comparable) | + 4,82,549 | 3,22,549 | 1,60,000 | ... | Heavy embellishment as ornamental bases and capitals, coving to ceiling, etc., and change over from lime mortar to cement mortar. |
| 16 | 31 | Providing ornamental plastering to pillars, bases and capitals, etc. | | | | | | Ornamental features and embellishments originally not provided for. |
| 17 | 32 | Acousting—plastering ... | — 196 Sq. | + 28,630 | 28,630 | ... | ... | Ornamental T.W. panelling inste d of ordinary acoustic plastering originally provided for. |
| 18 | 33 | Constructing R.C.C. domes as per design with stone veneering. | (Not comparable) | 4,54,000 | 4,54,000 | 4,54,000 | .. | Additional embellishments for architectural effect, and increased height of domes due to third floor, and heavy cut stone veneering. |
| 19 | 36 | Providing and fixing ceiling ... | — 114.3 Sq. | + 6,320 | ... | 6,320 | ... | Change over to costlier type of work for acoustic effect. |
| 20 | 37 | Providing main entrance steps ... | (Unit difference, not comparable) | 1,36,885 | 1,36,885 | 1,36,885 | ... | Heavy architectural features, change over of pattern and introduction of cycle stand. |
| 21 | 38 | Providing and fixing T.W. ornamental doors and windows. | + 6864 S.ft. | + 59,650 | | | | |
| | 39 | Providing perforated ventilators ... | + 3208 S.ft. | + 26,634 | 1,03,088 | ... | ... | Ornamental type of doors and windows ventilators and grills as an architectural feature. |
| | 40 | R.C.C. or steel grill work ... | ... | + 16,804 | | | | |

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| 22 | 41 | Constructing 1 : 2 : 4 R.C.C. chajja in continuation of lintel and providing pediment over windows. | + 2,346 | + 18,939 | 18,939) (Third floor | ... | ... | Architectural features and additional quantity for III floor. |
| | | Providing parapet and pediment over windows. | ... | + 31,130 | 31,130 | | | |
| 23 | 42 & 59 | Providing R.C.C. gallery in Assembly Hall. | (Not comparable) | + 31,856 | 31,856 | ... | ... | Architectural features, change over from brackets to beams and inadequate provision in 50 lakhs estimate. |
| 24 | 44,52 | Providing flooring ... | + 2,006 Sq. | + 5,06,223 | 5,06,223 | 5,06,223 (Change in pattern.) | ... | Change in pattern towards embellishments and additional terrazo work and addition of III floor—*vide* separate note. |
| 25 | 53 | Providing three line dressed cutstone cornice. | — 273 R.ft. | + 35,861 | 35,861 | 35,861 | ... | Additional embellishments for architectural effect. |
| 26 | 54 | Providing R.C.C. capotha cornice ... | (Not comparable) | + 45,720 | 45,720 | ... | ... | Additional embellishments for a architectural effect. |
| 27 | 58 | Providing balconies in outer facades ... | (Not comparable) | + 1,09,060 | 1,09,060 | ... | 1,09,060 | Additional architectural feature viz., providing balconies in outer facades, not originally contemplated. |
| 28 | 61 | Providing T.W. flooring and walling ... | + 131 Sq. | + 96,180 | 48,600 (T.W. walling) | 48,600 (Introducing of T.W. walling) | ... | Increased quantity and rate and introduction of teak wood walling, as an additional embellishment. |
| 29 | 63 | Providing dressed stone slab to entemblatures. | +1,747 R.ft. | + 1,99,960 | 1,99,960 | 1,99,960 | ... | Additional architectural features as veneering to entemblatures. |
| 30 | 64 | Providing and fixing architraves. | (Not comparable) | + 39,570 | 39,570 | 39,570 | .... | Do |
| 31 | 67 | Architectural finish providing ornamental cutstone ventilators, ornamental finish to main entrances, finish to lift walls and pulmane finish. | ... | + 76,200 | 76,200 | ... | ... | Additional architectural features. |
| 32 | 68 | Levelling ground ... | ... | + 80,000 | ... | ... | ... | Inadequate provision in Rs. 50 lakhs estimate. |
| 33 | 69 | Unforeseen and rounding ... | ... | — 17,407 | ... | ... | ... | Do |
| | | | Total ... | | 46,36,736 | 3,11,331 | 5,21,777 | |
| | | | | | | 54,69,844 | | |

Note— (1) The third floor was not included in the Rs. 50 lakh estimate.

(2) Column 6. Architectural features and embellishments shows the cost of such treatment adopted for the third floor also.

(3) The construction of a third floor was not dictated by the demands of accommodation. It has been introduced on account of the large width of the building and comparatively smaller height with two floors only. It has thus to be considered as an architectural necessity.

*Copy of letter No. 79—30-9-1954, from the Asst. Superintendent, Vidhana Soudha Division, Bangalore addressed to the Superintendent, Power and Light, City Area, Bangalore.*

*Subject* :- **Providing lights, fans, etc., to Vidhana Soudha.**

I wish to bring to your kind notice that during the two inspections of Vidhana Soudha by the Hon'ble Chief Minister in the week ending 18th Saturday and 25th Saturday, he definitely instructed not to order for the supply of even one ceiling fan out of 716 provided for all the 4-floors of Vidhana Soudha in the estimate submitted for sanction.

We are now proceeding with the embedding of conduit pipes and wiring, allowing for outlets, regulators, control switches, circuit switches, etc., for the total number of outlets and the load provided for in the estimate submitted to Government. The size of wires for the mains and distribution system have been calculated on the number of outlets and the load provided in the estimate and the laying of wires for the mains and distribution system are to be executed as per estimate sent up to Government. If, after a lapse of nearly 6 to 8 months, should there be any curtailment in the provision made in the estimate, it will not be possible to avoid loss of material embedded in concrete and wastage in the shape of using heavy conductors in place of smaller ones suitable to the modified load that may be sanctioned in future. *I am not in a position to proceed correctly in the absence of a sanctioned estimate and I wish to definitely point out and bring it to your kind notice* that it is humanly impossible to avoid heavy wastage unless things are definitely settled as regards providing electric lights and fans, etc., at Vidhana Soudha.

For instance, provision has been made in the estimate to provide concealed and indirect lighting for the dining hall with a false ceiling and no provision was made for embedding conduit pipes, since it was definitely understood that the distribution wires would be taken above the false ceiling. It is now decided, as I can understand by the recent inspections, that there should be no false ceiling at the Dining Hall. And added to this, the authorities are proceeding with the plastering, flooring, etc., without intimating us, as to their definite procedure in the finish of roofing and the flooring. In this position, I am not in a position to decide as to how the pipes have to be embedded and the distribution system arranged to co-ordinate with the type of structure and finish to be given by the Civil Engineering Department.

Under the above circumstances, I request you to kindly arrange for a meeting with the Special Engineer or Members of the Technical Committee and kindly settle the type of wiring, the number and type of outlets, the method of running conduits, etc., as an immediate measure and definitely settle all the points connected with the illumination system of Vidhana Soudha as I am afraid that this unsettled condition is going to be an unhealthy obstacle in the way of progressing our works and co-ordinating with the Civil Engineering progress, as the Civil Engineering Works are almost coming to a final shape and the time before us is too short to execute our works satisfactorily getting materials, and suitable foreign fittings, if they are decided upon.

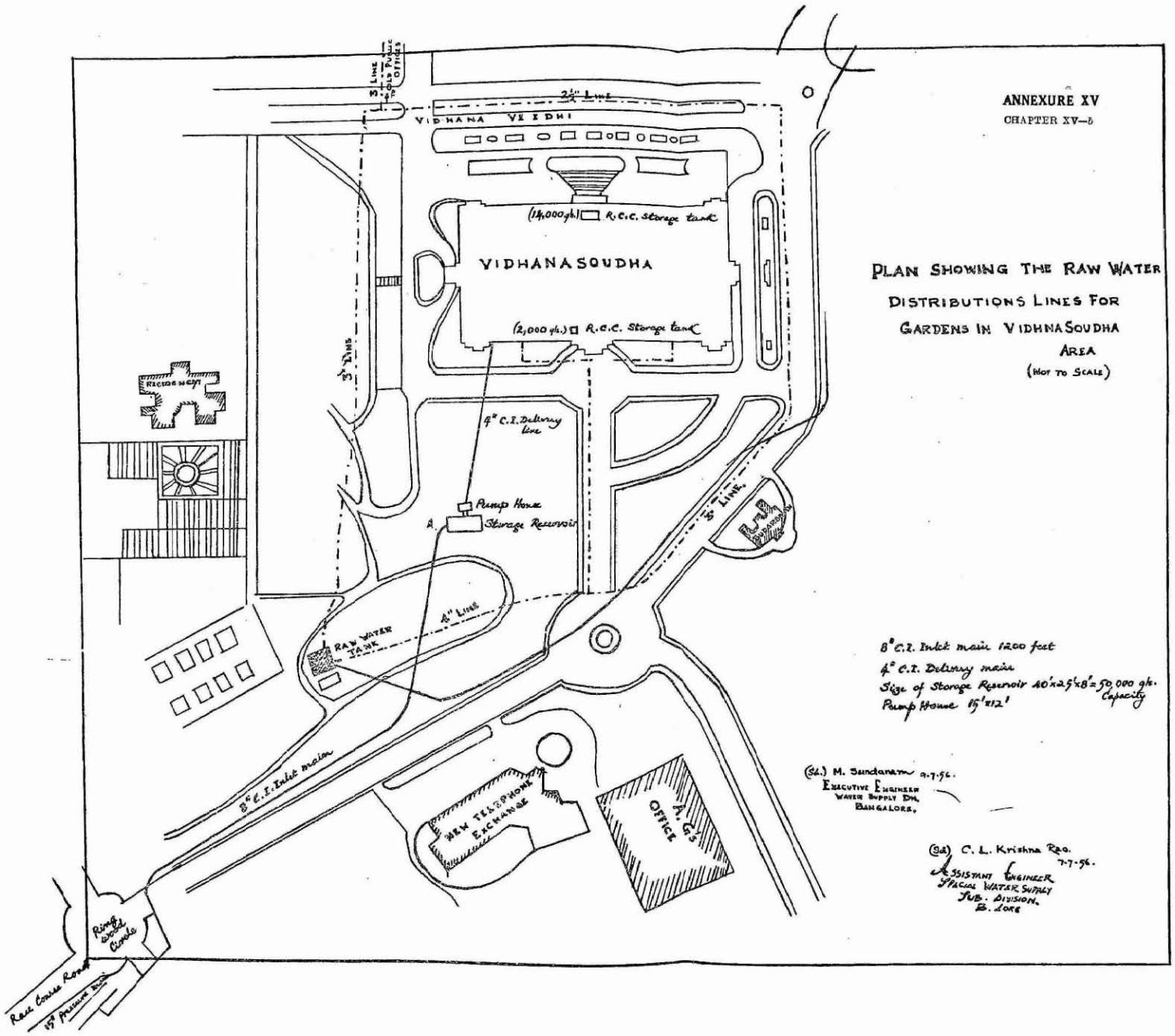
Last but not the least to be represented to yon is the inadequacy of staff provided for this work, *i.e.* only one Government Building Inspector to work under me for the supply of materials and execution of work, even after the start of ten months from the commencement of regular electrical works. The matter may kindly be treated as extremely urgent as I feel helpless with regard to the illumination of Vidhana Soudha Works.

"Copy"

(Sd.) G. CHANDY,
*Chief Electrical Engineer.*

ANNEXURE XV

CHAPTER XV—b




PLAN SHOWING THE RAW WATER DISTRIBUTIONS LINES FOR GARDENS IN VIDHNA SOUDHA AREA

(NOT TO SCALE)

8" C.I. Inlet main 1200 feet
4" C.I. Delivery main
Size of Storage Reservoir 40'x25'x8' = 50,000 gls. Capacity
Pump House 15'x12'

(Sd.) M. Sundaram 9.7.56.
EXECUTIVE ENGINEER
WATER SUPPLY DN.
BANGALORE.

(Sd.) C. L. Krishna Rao. 7.7.56.
ASSISTANT ENGINEER
SPECIAL WATER SUPPLY
SUB. DIVISION.
BANGALORE

CHAPTER XI (c)—ANNEXURE XVI-(i).

MYSORE PUBLIC WORKS DEPARTMENT — BANGALORE DIVISION

Data for $\frac{3}{4}$" premixed carpet and seal coat as per Indian Road Congress Specification.

| *Sl. No.* | *Item of work* | *Unit* | *Quantity* | *Rate* Rs. | *Cost* Rs. |
|---|---|---|---|---|---|
| I | Quantities of materials required per 100 Sft. of Road surface. | | | | |
| | (a) Materials— | | | | |
| | (i) Collecting, conveying and stacking granite stone chips $\frac{1}{2}$" (passing $\frac{3}{4}$" mesh retained on $\frac{3}{8}$" including lead) ... | Cft. | 6 | ... | ... |
| | (ii) Do $\frac{3}{8}$" down (passing $\frac{1}{2}$" mesh retained $\frac{3}{8}$" ... | Cft. | 3 | ... | ... |
| | (iii) Do for seal coat ... | Cft. | 3 | ... | ... |
| | Total ... | | 12 Cft. | | |
| | Or | | 4/9 Cyd. at Rs. 14-0-0 | | 6-4-0 |
| | (b) For flushing | | | | |
| | Collecting, conveying and stacking good sand including lead ... ... | Cft. | $\frac{1}{2}$ at 5-8-0 Cyd. | | 0-1-9 |
| | (c) Bitumen (including conveying the same to the spot) | | | | |
| | for mixing (6 plus 3) —9 Cft. of chips ... | lbs. | 33 | | |
| | for tack coat ... ... | do | 20 | | |
| | for seal coat ... ... | do | 20 | | |
| | | | 73 lbs. at Rs. 435 per ton. | | 14-3-0 |
| II | Labour charges 100/9 Syd. at Re. 0-5-0 Syd. ... | ... | ... | ... | 3-8-0 |
| | | | Total | ... | 24-0-9 |

Cost for 100 Sft. Rs. 24-0-0 only.

(Sd.) R. A. SAMPATH IYENGAR,
*Executive Engineer,*
*Bangalore Division.*

" COPY "

Abstract estimate for the construction of 50 Garage for Vidhana Soudha.

| Item No. | Description of work | Unit. | Rate | Quantity | Cost |
|---|---|---|---|---|---|
| | | | Rs. a. p. | | Rs. a. p. |
| 1 | Earthwork excavation in hard gravelly soil ... | C.yd. | 1 0 0 | 273 | 273 0 9 |
| 2 | Laying 1 : 3 : 6 plain cement concrete for foundation ($\frac{1}{2}$ ft. thick). | C.ft. | 1 2 0 | 1,229 | 1,381 1 0 |
| 3 | Construction of size stone masonry for foundation in cement mortar 1 : 6. | C.ft. | 0 15 0 | 3,818½ | 3,580 7 6 |
| 4 | (*a*) Construction of size stone masonry in cement mortar 1 : 6. | C.ft. | 1 2 0 | 7,980 | 8,977 8 0 |
| | (*b*) Construction of size stone masonry pillars in 1 : 4 cement mortar, with single block ($1\frac{1}{2}' \times 1\frac{1}{2}' \times \frac{2}{3}$) at every 4th course to serve as bearing slab and with quoin dressing at all the edges. | C.ft. | 2 4 0 | 844 | 1,899 0 0 |
| 5 | (*a*) R.C.C. T. beam with 1 : 2 : 4 c.c. with necessary reinforcements. | C.ft. | 5 11 0 | 2,709½ | 15,287 15 0 |
| | (*b*) R.C.C. 1 : 2 : 4 rectangular beam at every 100′ apart. | C.ft. | 4 12 0 | 315 | 1,496 4 0 |
| | (*c*) R.C.C. 1 : 2 : 4 bearing slabs below beams ... | C.ft. | 4 0 0 | 600 | 2,400 0 0 |
| 6 | Laying 1 : 2 : 4 R. C. C. roofing $4\frac{1}{2}''$ thick with necessary reinforcements, with surki concrete (1 : 3) 4″ thick including two courses of flat tiles and plaster on top ceiling plaster, etc., complete. | Sq. | 146 4 0 | 125 | 18,281 4 0 |
| 7 | Cement mortar pointing to walls after raking and nicely lining. | Sq. | 6 8 0 | 108·5 | 705 4 0 |
| 8 | Cement concrete 1 : 2 : 4—$1\frac{1}{2}''$ thick over a bed of lime concrete 3″ thick, and plastered over and rough finished. | Sq. | 40 0 0 | 100·0 | 4,000 0 0 |
| 9 | Plain parapet wall with burnt brick in mortar 9″ thick 15″ high. | R.ft. | 2 8 0 | 550·0 | 1,375 0 0 |
| 10 | Providing 4″ cement asbestos rain water down pipes for alternate bays. | R.ft. | 2 6 0 | 250 | 593 12 0 |
| 11 | Providing 6″ wide U-shaped drain in brick in cement mortar, along the length of the garage on the rear with suitable drainage arrangements. | R.ft. | 1 10 0 | 550 | 893 12 0 |
| 12 | Miscellaneous and unforeseen including formation of approach, etc. | R.ft. | ... | ... | 355 12 6 |
| | Total ... | ... | ... | ... | 61,500 0 0 |

## IMPORTANT OBJECTIONS RAISED IN INSPECTION REPORTS OF THE ACCOUNTANT GENERAL AND CORRESPONDING REMARKS OF THE COMMITTEE.

### 1. Cash

*Inspection Report of October* 1953

*Advances.*— Individual accounts for the advances sanctioned have to be maintained and it should generally be seen that the previous advance is adjusted in full before sanctioning a fresh advance and at any rate, at the end of the month invariably. This procedure would not only help to clear the advance account monthly but also would prevent unnecessary locking up of funds with the subordinates.

*Special Inspection of February* 1956

The rules prescribed for the proper maintenance of cash book are not strictly followed giving room for the following irregularities, which require to be remedied :

(1) Cash balance at the end of the month has not been detailed in a note at the foot of the cash book as required in paragraph 144 (9) of the Mysore Public Works Account Code.

(2) Increases or decreases in the amount of the imprest has not been entered in the cash book by noting the entries on the payment side and the decreases on the receipt side *vide* instructions in paragraph 144 (5) *ibid.*

(3) Temporary advances are being given by the Divisional Officers to the subordinate officers on requisitions received from them instead of on passed muster rolls or task work bills contrary to the provisions contained in the paragraph 151 *ibid* which is unauthorised.

(4) Imprest and temporary advance holders are not rendering accounts in Form P.W.A. 3 to the Divisional Office from time to time as contemplated in paragraph 149 *ibid.*

(5) There is no indication of check by the Divisional Accountant of the transactions recorded in the Cash Book in accordance with the rule under paragraph 660 *ibid.*

(6) Heavy amounts are outstanding with imprest holders.

NOTE.—Large advances have been made to Sub-Division Officers, the amounts being far in excess of requirements. This has been commented upon by us in paras 3, 7, 10, 13 and 18 of Chapter XIV.

### 2. Tenders, Quotations and Agreements:—

*Inspection Report of October* 1953

Quotations have been called for, for the supply of fine sand, baby jelly, big jelly, size stones, slabs, and for labour for laying concrete for foundation, etc., in piecemeal. The Divisional Accountant in his note dated 18th October 1953 has stated that about 1,36,069 C.ft. of size and bond stones at an approximate value of Rs. 81,660 have been procured on the basis of such local quotations or at rates fixed by the Special Engineer. It is also stated that the Superintending Engineer has directed the Special Engineer to call for tenders after wide publicity in the *Mysore Gazette*. The Special Engineer has passed orders as follows : " Work cannot be stopped for this reason. Tenders may be called for and rates decided. The present arrangements may continue till then."

The Special Engineer has now explained that the exact quantities required for the construction work could not be assessed since the plan was not finalised and the estimate was also not sanctioned and he also explained that he has fixed the rate for the purchase of materials on the basis of quotations received, taking care to see that the rates so fixed are the lowest. He also said that as the quantities required could now be ascertained approximately, tenders would be called for, for all future supplies. Since urgency of work and want of a sanctioned estimate cannot be considered as sufficient grounds for deviation from the usual rules of purchase specially when such huge quantities of materials worth several thousands of rupees are involved, the procedure followed may be reported to Government and their approval obtained.

*Inspection Report of October* 1954

As in the past, the supply of materials is being given to a number of piece-work contractors after calling for quotations or tenders.

NOTE.—This has been commented upon in paras 78 and 79 of Chapter XIII.

### Quotations for Erection of Nissan Huts.

*Inspection Report of October* 1953.

Even in this case, the Accountant has pointed out that the work of erection of 8 Nissan Sheds has been given out after calling for quotation for one hut only and adopting the same rate to the others and that more favourable rates could have been obtained had quotations been called for all the 8 huts together. The action taken by the Special Engineer requires ratification by the Superintending Engineer since the cost of the work is beyond his powers of sanction as per para 113 (2) of the M.P. W.A. Code.

NOTE.—The Committee has observed that Special Engineer has always acted in excess of powers thus practically compelling Government or the Chief Engineer as the case may be to accord *post-facto* sanction.

### 4. Mutchalikas.

*Inspection Report of October* 1953.

The following are some of the omissions noticed in the Mutchalikas obtained from the contractors : It is essential to avoid such omissions if the Mutchalikas have to serve the purpose for which they are obtained :—

(i) The printed schedule of contract referred to in the agreement is not enclosed to the same, duly signed by the contractors. In a few cases blank forms signed merely by the contractors are enclosed.

(ii) The rates accepted are noted only in figures and not both in words and figures.

(iii) There is no specific penalty clause either for short progress or for failure to comply with the terms of contract.

NOTE:—This has been commented upon in para 196 of Chapter. XV. The absence of this clause has resulted in purchase at higher rates when the previous tenderer failed to supply or perform the contract. Please see paras Chapter XV (*g*) and XVI (*f*), (*g*) regarding bricks, casuarina poles, ducts, etc.

**5. Materials-at-Site Account.**

*Inspection Report of October 1953.*

A sum of Rs. 49,891—5—9 was paid for materials collected and paid for in March 1953. The subordinate's materials return was not available to verify the same. These returns should be obtained every month and verified with the balances shown in the 'C' Register of the Division Office. The annual certificate of materials-at-site for the year ended 31st March 1953 has not been sent to the Audit Office as required in para 630 of M.P.A.Code.

*Inspection Report of October 1954.*

This account is not available in the Division Office. Numerical accounts of such materials are being received from sub-divisions but no watch is kept over their receipt nor are the returns scrutinised in the Division Office. The statement of unused balances of materials-at-site of works in Form P.W.G. 15 due at the end o 1953-54 has not been received from any of the sub-divisions so far. The non-maintenance of proper accounts of materials-at-site duly reconciled with the returns of sub-divisions is a serious matter requiring immediate attention as the Vidhana Soudha building is being executed departmentally and the bulk of expenditure will be on materials.

*Inspection Report of March 1955.*

Non-maintenance of materials-at-site account in the Division Office in the prescribed form and failure to secure agreements between the balances shown in the division Registers and those accounted for in the sub-divisional returns from month to month, is a serious omission.

*Special Inspection Report of February 1956.*

It is noticed that an annual register in form No. P.W.G. 11—D has not been maintained in the divisional and sub-divisional offices giving a continuous record of the receipts, issues and balances of all materials acquired for the work for all the months of the year. These returns are seem to have been kept in the Divisional Office without any scrutiny to see if all the returns due from the several sub-divisional offices have been actually received and whether the entries in the statements are supported by corresponding entries in the suppliers bills or in the register of stock issues or in the nominal rolls or in the piece-workers' bills. Two separate registers, one for receipts and the other for issues of materials maintained continuously since the commencement of the work have been made available for review. A review of the receipt registers indicates that it is not complete in several ways and is also not in the prescribed form.

NOTE:—*Vide* paras 28 to 32—Chapter XIII of the Report.

**6. Estimate of Vidhana Soudha Building.**

*Inspection Report of October 1953.*

In G.O. No.P.W. 6836-37. Estt. 40-52-53, dated 24th February 1953 sanctioning the formation of the Division for the construction of Vidhana Soudha, it is stated that a Committee has been constituted to evolve a design for the building and it was proposed to execute the work by a departmental agency. Apart from this, there is neither administratively nor technically sanctioned estimate. It is observed that the abstract Estimate for Rs. 50 lakhs does not provide for the following items of work, which are essential part of the building:—

(i) Tools and plant charges,

(ii) Water supply connections,

(iii) Sanitary fittings,

(iv) Electrical fittings.

NOTE:—*Vide* paras 16, 22 to 24 of Chapter VII and Paras 4 and 5 Chapter XIX of the Report.

**7. Nominal Rolls.**

*Inspection Report on October 1953.*

The review of the nominal rolls and the working rates shown therein reveal considerable variations in rates between roll and roll. In the absence of an approved data, no check is exercised on such variations.

*Inspection Report of October 1954*

The attendance of workmen is marked only by classes of labour like carpenters, bar-benders without grouping them under the several sub-heads of work on which they are actually employed, *vide* para 113 E of P.W. Account Code. The test check of the record of attendance on the rolls of the Central Block where the largest number of labourers are employed is inadequate.

*Special Inspection Report of June 1956.*

The labour reports sent do not furnish the details of labour employed on each work or sub-head. The allocation of labour furnished in the rolls cannot be checked with reference to the labour reports. The working rates are far exceeded the estimated rates in a few cases. Though separate muster rolls and daily reports are prepared in respect of over-time labour, it is seen that no separate progress of work done or quantity of work done is recorded on each Muster Roll, for extra hours worked.

NOTE.—*Vide* paras 56 to 65 of Chapter XIII of the Report.

## 8. Store Accounts

*Inspection Report of October 1953.*

The value of store articles issued to works is not so far adjusted in accounts with the result that the work account does not reflect the actual cost on the work.

The Store accounts have not been maintained as prescribed in paras 251 to 253 of the Mysore P.W.A. Code. The Registers of daily receipts and issues, abstracts of stocks received and issued have not been maintained. In the absence of the Registers, the accuracy of stock debits and credits cannot be verified. As the issues have not been adjusted since the commencement of the Division, it is very necessary to bestow special attention to this item of work and the work got up-to-date. As the half-yearly return for the period ending September 1953 is due to be sent to the Audit Office, immediate action has to be taken to compile the return. As the store transactions of the Division are heavy, it is necessary that the store accounts are maintained properly and up-to-date in accordance with the rules prescribed in the code. Any delay in this behalf may lead to confusion in accounts at a later stage.

*Inspection Report of October 1954.*

The half-yearly return of stock for the period ending 31st March 1954 is nearing completion. The above account discloses that the closing balance of stock at the end of March 1954 was Rs. 1,78,879-79 against the book balance of Rs. 2,96,924-3-6. The deficit is seen to be due mainly to certain stock articles issued previously not having been charged off by credit to stock in the months concerned and is mostly adjusted since.

The return of Tools & Plant for the year ending 31st March 1954 is also under compilation. It has to be sent to the Audit Office as expeditiously as practicable.

*Special Inspection Report of February 1956*

The Reserve limit of stock sanctioned for this Division is Rs. 3 lakhs and against this the closing balance of stock as per accounts at the end of January 1956, is Rs. 11,78,244 which is in excess over the sanctioned limit by Rs. 8,78,244. This requires to be regularised early by obtaining sanction of the competent authority.

According to the monthly accounts for March 1955 (Supplemental) the closing balance of stock is Rs. 8,98,847 whereas the total value as per the balance return of stock for the period ending March 1955 is Rs. 6,47,630 resulting in a difference of Rs. 2,51,217. This requires immediate reconciliation and necessary action.

## 9. State of Accounts.

*Inspection Report of October 1953.*

This is a newly formed Division which is likely to last for three or four years. The maintenance of detailed and up-to-date accounts is as important as the execution of works specially when the whole work of construction of Vidhana Soudha building is done departmentally and it is quite essential to account for every bit of material purchased and to watch variations in the working rate per unit of the same kind of work and to compare it with the estimated rates. *Unless detailed accounts are maintained, the Executive would be helpless in the matter of exercising any control over either labour or materials. The present condition of account is not satisfactory.*

*Inspection Report of October 1954.*

Urgent action is called for to maintain materials accounts, works abstracts, register of works and contractor's ledgers in the prescribed form and to get the detailed estimates of the Vidhana Soudha buildings sanctioned by Government.

The account records relating to the current period are also not prepared in the prescribed forms and closed and agreed according to rules. There is a tendency for the current work also to get into arrears. Arrangements may be made to arrest this tendency and for the expeditious clearance of the work in arrears, if necessary, in consultation with the Financial Assistant to the Chief Engineer.

*Special Inspection Report of June 1956.*

*As the several items of work relating to the construction of this building are nearing completion, immediate steps have to be taken to have the materials accounts, work accounts and manufacture accounts brought up-to-date.*

NOTE :—*Vide* paras 35 to 49 Chapter XIII of the Report . . . . .

## 10. Register of works and work abstracts

*Inspection Report of October 1954.*

The Division has not yet introduced the system of preparation of work abstracts by the sub-division office as prescribed in para 392 to 396 of Mysore P.W.A. Code. Except in the case of construction of a building for the Accountant-General's Office, no registers of works are maintained in the Division Office as also observed in para 11 of the report of March 1954. As a result, information regarding the value of materials held at site of the several works, of the actual working costs of sub-heads as compared with the estimated costs and of the amounts due to and from contractors and piece-workers, is not available. In the absence of the Register of works, the Divisional Officer cannot obviously exercise an effective control over expenditure (*Vide* para 250 of Mysore P.W.A. Code)

It is therefore necessary to introduce work abstracts and registers of works without further loss of time as the works are in full swing and effective control over expenditure is of paramount importance at this stage.

*Special Inspection Report of March 1955.*

The work abstract and work registers are not maintained in the prescribed forms.

Under paragraph 398 of Public Works Account Code, the Divisional Officer is required to examine monthly the works abstracts which are detailed accounts of transactions on works and furnish among others the cost as well as the working rate of each sub head of a work or sub work for comparison with the estimates. The rule lays down that the monthly examination of the works

abstract is an important part of the duties of the Divisional Officer and must not be omitted. In this Division, the monthly examination referred to has not been conducted so far.

*Special Inspection Report of February 1956.*

The works abstract in Form No. P.W.A. 10 have neither been prepared in the sub-division and submitted to the Division Office monthly so far, nor prepared and completed in the Divisional office. However a 'C' Register has been constructed to end of August 1955 from the several paid work bills and Nominal Rolls and the postings in the register have also been reviewed and accepted by the Special Engineer to end of March 1955.

No work registers in Form No. P.W.A. 12 have been maintained so far. The necessary instructions were given by the Inspecting Accounts Officer to the arrear clearance staff. The postings in the registers will have to be reviewed by the Divisional Accountant and the Special Engineer and passed by them. The registers should be brought up-to-date and then continued month after month without allowing it to fall into arrears.

### 11 Reports of verification of unused materials.

*Special Inspection Report of February 1956.*

Reports of verification of unused balances of materials in Form No. P.W.G. 15 annually or at the time of the transfer of an officer in charge of the works have not been prepared by the Sub-Divisional Officer and submitted to the Divisional Office, giving reasons for the differences, if any, in quantities between the book balances and those as per actual count at the site of works. Steps will have to be taken to arrange for the actual verification of the balances at the site of works on 31st March 1956 and the suggestion has been agreed to by the Special Engineer.

NOTE :—*Vide* paras 26 and 27 Chapter XIII of the Report.

### 12 Data Sheets.

*Inspection Report of March 1956.*

Except for cut stone pillars and stone-dressing, Task Work data sheets have not been got approved by the Chief Engineer. The work is nearing completion and there are more than 300 items of work for which data sheets have yet to be got approved. Early action may please be taken to submit the working data sheets to the Chief Engineer and obtain approval. This will be necessary to settle the final claims of piece-workers.

*Special Inspection Report of June 1956.*

At the time of last inspection, data sheets for 8 items of work had been got approved by the Chief Engineer. Since then 80 data sheets have been forwarded and 50 more are under despatch. 73 Data Sheets are under scrutiny. Still there are more than 100 items for which data sheets have to be worked out. Action has to be taken to prepare the data sheets for all the special items of works and to get approval thereto immediately as the works are nearing completion.

It is seen that most of the items for which Data Sheets have been prepared are under execution from 1953-54. The adoption of the rates for 1955-56 in the data sheets for items of work started in 1953-54 does not appear to be correct.

### 13 Steel roofing over the halls.

*Special Inspection Report of June 1956.*

In G.O. No. P.W. 1132-35/B. 6-55-11 dated 30th May 1955, it is stated that the work of fabricating and erecting steel trusses for the Assembly Hall and the Council Hall of Vidhana Soudha had been entrusted to the Central Industrial Workshop and with a view to getting through the work expeditiously the work had to be entrusted to an outside agency, M/s. Steel Construction Co., Bangalore, who had originally quoted for labour and fixing charges only at Rs. 35 a cwt. Later a revised rate of Rs. 60 a cwt. including the cost of materials which should be supplied by the Department, was agreed. As against the original rate of Rs. 46 a cwt. quoted by the Workshop the rate agreed to be paid to the private company was Rs. 60 a cwt. involving an extra cost of about Rs. 9,000 for the entire structure of about 30 tons. When an overall rate is agreed to be paid, it is essential to recover the supervision charges of 10 per cent over the cost of materials supplied departmentally. It is not clear as to why the extra cost of about Rs. 1,500 relating to supervision charges should be borne by the Division. This virtually amounts to enhancing the rate payable to the firm.

NOTE :—*Vide* paras 80 to 83 of Chapter XVI of the Report.

CHAPTER XIII—ANNEXURE XVIII.

## Document No. 10

Shown to Witness No. 19 on 27th November 1956 and referred to in para 9 of the deposition today.

(Sd.) P. P. DEO,
*Chairman.*
28-11-1956.

*Receipts and issues of Cement in the Divisional Stores.*

I have examined the Receipts and Issues of Cement from April 1953 to 22nd October 1956.

*Receipts.*—The receipts of cement as noted in the receipt registers have been examined from the following records :—

(1) Railway Receipts Register.

(2) Railway Delivery Notes.

(3) Invoices from the firms.

and the following important mistakes are noticed.

(A) On 4th May 1955, there is an entry of 1,750 bags of cement in the Receipts Register. This is not supported by any Railway Receipt or relative Delivery Note. No bill is passed pertaining to this. This must be an erroneous entry inasmuch as there is a receipt of 1,750 M.S. rods on that date. These 1,750 rods of iron are accounted for under that head of account also. The monthly accounts of cement have, however, been compiled taking into account these 1,750 bags also. This error continues till today.

(B) During October 1955, there is a short total of 100 bags of cement. The total taken to monthly accounts is 14,372 bags as against the actual receipt of 14,472 bags.

(C) Two hundred and fifty bags of cement received from Water Supply Division during June 1954 is not at all taken to account till this date although the relative advice of transfer of Water Supply Division is accepted. How this is done without accounting for it in the receipt register requires a clear explanation.

*Issues* —The Issue Registers have been completely verified with all the indents from the commencement of the Division. A monthwise statement of issues of cement to each Supervisor and other contractors has been prepared after careful verification of all the indents.

The following important omissions noticed have been enumerated :—

December 1953. (*a*) Two hundred bags of cement issued to Sri Balakrishna, Supervisor during December 1953 *vide* Indent No. 129, 8th December 1953 is entered twice in the stock issue register, thereby reducing the stock balance by 200 bags in excess over the actual issue.

The materials-at-site account of the Subordinate shows only 200 bags.

January 1954. (*b*) One hundred and fifty bags of cement issued to Sri Balakrishna during January 1954 *vide* Indent No. 216—172, dated 9th January 1954 is omitted in the issue register and consequently in the monthly accounts.

The subordinate has taken this receipt to his materials-at-site account.

April 1954 (*c*) Two hundred bags of cement are issued to Sri Balakrishna during April 1954 and are accounted in the stock issue register as 200 skeins of Coir rope ; thus there would be an excess of 200 bags of cement and a shortage of 200 skeins of coir rope in accounts than actuals.

The subordinate has, however, taken correctly in his account.

August 1954. (*d*) Five bags of cement issued to Sri Visvanath, Supervisor *vide* Indent No. 144—116, dated 9th August 1954 are accounted as H.S.D. Oil in store account.

October 1955. (*e*) Two hundred bags issued to Sri Balakrishna, Supervisor, are shown in the issue register as only 2 bags.

The subordinate has taken 200 to his account.

November 1955. (*f*) One hundred and twenty bags are issued to Sri Boriah Basaviah & Sons, Contractors, during November 1955, whereas the stock accounts have been charged with only 100 bags, thus omitting the account of 20 bags. The contractors have been charged with the cost of only 100 bags.

December 1955. (*g*) One hundred and sixty bags have been issued to Sri Honnurappa, Supervisor during November 1955 while the stock accounts show only 150, thus omitting 10 bags in account.

March 1956 (*h*) One thousand bags issued to Central Industrial Workshop on 30th March 1956 are taken to account in September 1956, *six months after the issue.* How this huge quantity had been omitted to be accounted for all these six months, is a point for consideration.

March 1956 (*i*) Forty-four gallons of H.S D. Oil issued to Sri Panduranga Rao, Supervisor, *vide* Indent No. 50, dated 1st March 1956 are accounted for as cement. The monthly total of 10,187 bags of cement shown as issued during March 1956 includes this 44 also.

May 1956 (*j*) Two hundred bags of cement issued to Sri Balakrishna, Supervisor, *vide* Indent No. 33—May 1956 are omitted in stock account; nor is there any relative indent in the Indent file since traced and produced. The Supervisor has noted these 200 bags in his materials-at-site account.

Taking into account all the above factors into consideration, both with regard to Receipts and Issues of cement, a statement showing the receipts and issues for each half-year as they ought to be is prepared and put up. The closing balances thus arrived are compared with the closing balances noted in the respective half-yearly return of stock. It is seen that the two figures are widely different.

A similar statement as per their books is also prepared and it is seen that the receipts and issues as they ought to have been, differ from these figures in many cases.

Besides the above, there are a number of indents with corrections not initialled by the Officers concerned. In a large work like this where the issues are continuous and in large quantities both from the stores and from the Sub-divisions to works, these corrections play an important part.

The following few instances are given:—

(1) *Indent No* 59—113 *dated 30th July* 1954.—Issue of 200 bags of cement to Sri P. V. Somasekhar, Supervisor—100 is changed to 200. (Subordinate has taken to his account 200.)

(2) *Indent No. e*$_1$ *dated 1st April 1955.*—Cement issued to Sri M. R. V. Pathy changed from 200 to 100 and again to 1 0. Both the figures 100 and 150 are retained. The I.R. shows 150. (M.A. site account also shows 150).

(3) *Indent No. 9—139, dated 16th April 1955.*—Issued to Sri Balakrishna Supervisor—150 is changed to 300. I.R. shows 300 and materials at site account also shows 300.

(4) *Indent No. 170, dated 18th April 1955 to Sri M. R. V. Pathy.*—200 bags are issued. There are a number of corrections and overwritings. Issue Register and materials at site account show 200 bags.

(5) *Indent No. 213, dated 22nd April 1955 to Sri M. R. V. Pathy, Supervisor.*—The figures in the indent are 150, 100, three hundred. The I.R. shows 150 and the materials-at-site account also shows 150.

(6) *Indent No. 67—C. 12, dated 28th April 1955 to Sri M. R. V. Pathy.*—Two hundred is corrected to 4 0 0. Orders of the officer are to issue 200 bags whereas the issue is 400. I. R. shows 400 and the subordinate's materials-at-site account shows also 400.

(7) *Indent No. 86—508, dated 19th October 1955 to Sri Boriah.*—Ten changed to 20. I.R. shows 20. Materials-at-site account also shows 20.

(8) *Indent No. 381, 17th March 1956 for 25 bags of cement issued to Sri Vasudeva Chetty, Supervisor.*—The original Indent is for Coir Rope for scaffolding. The item Coir Rope is struck off and 25 bags of cement entered in its place. Name of the work (scaffolding) is not changed. There are no initials for change of cement to coir rope. (The account of the Supervisor shows the receipt of 25 bags of cement against this indent).

(9) *Indent No. 631, dated 28th March 1956 to Sri Honnurappa, Supervisor.*—Issue of 2,800 bags of cement for R.C.C. work—Main Dome: No officer has signed the indent copy filed in the store section. (In this connection, a separate statement showing the excess issues to works, over the actuals required, is put up.)

On a perusal of the issues of cement by this subordinate during March 1956, it is seen that there have been excess issues, over the actual requirements in a number of cases. (Separate statement *vide* annexure XXIII).

(10) *Indent No. 211—7th August 1956to Sri Honnurappa.*—100 is changed to 200 and this change is noticed in the issue register also. Materials-at-site account shows 200.

*General.*—The Indents have not been checked with the issue register and monthly stock abstract of issues by the Accounts Branch for the greater portion of the period. Thus many errors of various categories have occurred and are remaining unrectified so far.

Indents to the extent of 1,180 bags (1,080 bags issued from 8th October 1956 to 20th October 1956 and 100 bags issued in September 1955) *vide* statement II enclosed, were produced at the time of counting. It is seen that these indents though issues were made earlier, were not posted in the issue register.

STATEMENT No. 1.

*Abstract of Receipts and Issues of Cement at the end of each half-year.*

| Sl. No. | Period | Opening Balance | Receipts | Total | Issues | Closing Balance as it ought to be | Closing Balance as per stock Returns | Difference | Counted Balances | Remarks |
|---|---|---|---|---|---|---|---|---|---|---|
| 1 | From 4/53 to 9/53 ... | ... | 30,601 | 30,601 | 24,899 | 5,702 | 5,713 | 11 | ... | ... |
| 2 | ,, 10/53 to 3/54 ... | 5,702 | 34,384 | 40,086 | 37,804 | 2,282 | 2,243 | 39 | 2,243 | No remarks. |
| 3 | ,, 4/54 to 9/54 ... | 2,282 | 49,804 | 52,086 | 50,211 | 1,875 | 1,791 | 84 | 1,791 | No remarks. |
| 4 | ,, 10/54 to 3/55 ... | 1,875 | 48,520 | 50,395 | 49,418 | 977 | 893 | 84 | 113 | 780 Loans to other Divisions. |
| 5 | ,, 4/55 to 9/55 ... | 977 | 58,445 | 59,422 | 59,222 | 200 | 2,166 | 1,966 | 216 | 1,950 bags less. |
| 6 | ,, 10/55 to 3/56 ... | 200 | 59,608 | 59,808 | 56,476 | 3,332 | 6,382 | 3,050 | 2,732 | ... |
| 7 | ,, 4/56 to 9/56 ... | 3,332 | 40,882 | 44,214 | 41,821 | 2,393 | ...* | ... | ... | *The balance is not struck. |
| 8 | ,, 10/56 to 22nd October 1956. | 2,393 | 1,315 | 3,708 | 1,091 | 2,617 | ... | ... | ... | ... |
| 9 | Issues as per Indents (*Not yet entered in the* Issue Register) Produced at the time of counting. | 2,617 | ... | ... | 1,180 *Vide* separate statement enclosed | 1,437 | (Counted Thus | balance there is | 1,507 on an excess | 22nd October 1956.) of 70 bags. |
| | Total ... | 3,23,559 | ... | ... | 3,22,122 | ... | ... | ... | ... | |

Receipts and issues noted have been checked and found correct as per invoices and indents.

(Sd.) A. V. SIVAGNANAM,
*Store-keeper.*

STATEMENT No. 2.

*stract of receipts and issues of Cement at the end of each Half-Year, as per Accounts sent to the A. G.*

The balances as per accounts checked up with invoices and Indents are shown in *Red Ink*.

| Sl. No. | Period | Opening Balance | | Receipts | | Total | | Issues | | Closing Balance | | Remarks |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | As audited | As per books | As audited | As per books | As audited | As per books | As audited | As per books | As audited | As per books | |
| 1 | From 4/53 to 9/53 ... | ... | .. | 30,601 | 30,601 | 30,601 | 30,601 | 24,899 | 24,888 | 5,702 | 5,713 | |
| 2 | ,, 10/53 to 3/54... | 5,702 | 5,713 | 34,384 | 34,384 | 40,086 | 40,097 | 37,804 | 37,854 | 2,282 | 2,243 | |
| 3 | ,, 4/54 to 9/54... | 2,282 | 2,243 | 49,804 | 49,554 | 52,086 | 51,797 | 50,211 | 50,006 | 1,875 | 1,791 | |
| 4 | ,, 10/54 to 3/55... | 1,875 | 1,791 | 48,520 | 48,520 | 50,395 | 50,311 | 49,418 | 49,418 | 977 | 893 | |
| 5 | ,, 4/55 to 9/55... | 977 | 893 | 58,445 | 60,195 | 59,422 | 61,088 | 59,222 | 58,922 | 200 | 2,166 | |
| 6 | ,, 4/55 to 3/56 .. | 200 | 2,166 | 59,608 | 59,508 | 59,808 | 61,674 | 56,476 | 55,292 | 3,332 | 6,382 | |
| 7 | ,, 4/56 to 9/56... | 3,332 | 6,382 | 40,882 | 40,882 | 44,214 | 47,264 | 41,821 | 42,821 | 2,393 | 4,443 | |
| 8 | ,, October 1956 to 22 Oct. 1956 | 2,393 | 4,443 | 1,315 | 1,315 | 3,708 | 5,758 | 2,271 | 1,091 | 1,437 | 4,667 | |
| | | | | 3,23,559 | 3,24,959 | ... | ... | 3,22,122 | 3,20,292 | 1,437 | 4,667 | |

Checked. This is as per accounts. Differences are being traced and regularised.

(Sd.) A. V. SIVAGNANAM,
*Store-Keeper.*

STATEMENT No. 3.

*Indents pertaining earlier to 22nd October 1956 but* **not entered** *in the Issue Register—produced at the time of counting.*

| Sl. No. | Indent No. | Date of issue as stated in the indent by the Store Keeper | Name of Supervisor | No. of Bags |
|---|---|---|---|---|
| | | | Sriyuths— | |
| 1 | 629 | 10th October 1956 ... | Prasad ... | 50 |
| 2 | 39 | 11th October 1956 ... | Sridhar ... | 25 |
| 3 | 631 | 11th October 1956 ... | Prasad ... | 50 |
| 4 | 505 | 12th October 1956 ... | Mohamed Ali ... | 5 |
| 5 | 207 | 15th October 1956 ... | Balakrishna ... | 25 |
| 6 | 76 | 16th October 1956 ... | D. S. R. Gupta ... | 50 |
| 7 | 632 | 17th October 1956 ... | Prasad ... | 200 |
| 8 | 507 | 18th October 1956 ... | Mohamed Ali ... | 5 |
| 9 | Requisition | 6th September 1955 ... | Boriah Basaviah ... | 100 |
| 10 | 201 | 8th October 1956 ... | Balakrishna ... | 50 |
| 11 | 94 | 9th October 1956 ... | Honnurappa ... | 100 |
| 12 | 70 | 15th October 1956 ... | Ugrappa ... | 50 |
| 13 | 73 | 17th October 1956 ... | Ugrappa ... | 10 |
| 14 | 452 | 17th October 1956 ... | Channaveerappa ... | 40 |
| 15 | 81 | 19th October 1956 ... | D.S.R. Gupta ... | 100 |
| 16 | 74 | 20th October 1956 ... | Ugrappa ... | 20 |
| 17 | 96 | 20th October 1956 ... | Honnurappa ... | 100 |
| 18 | 191 | 20th October 1956 ... | R. Vasudeva Chetty ... | 25 |
| 19 | 638 | 19th October 1956 ... | Prasad ... | 50 |
| 20 | 639 | 20th October 1956 ... | Prasad ... | 100 |
| 21 | 212 | 20th October 1956 ... | Balakrishna ... | 25 |
| | | | Total ... | 1,180 |

## Document No. 11

Shown to Witness No. 19 on 27th November 1956 and referred to in his evidence in para 14 today.

(Sd.) P. P. DEO,
*Chairman,*
28-11-1956.

### *Verification of receipts and issues of Steel Sections in Vidhana Soudha Division.*

*Receipts.*—During verification of receipts of steel sections in the Vidhana Soudha Division, it was observed that in support of many receipts the original invoices of supplying firm or office were not forthcoming for verification. A statement of such instances is enclosed. (Appendix I).

*Invoice No. 237, dated 25th March 1954.*—It is seen that this Invoice received from P.W.D. Central Stores among other sizes consists of the following quantities :—

*M. S. Rods.*—

| | | | |
|---|---|---|---|
| (1) $\frac{3}{4}''\times 48'$ | ... | ... | 60 rods. |
| (2) $\frac{3}{8}''\times 20'$ | ... | ... | 60 bundles. |
| (3) $\frac{3}{8}''$ of different sizes | | ... | 170 bundles. |
| (4) $\frac{1}{2}''\times 14'$ | ... | ... | 400 rods. |

The first three items have been taken to Receipt Register on 25th March 1954 on page 8. The 4th item pertaining to $\frac{1}{2}''$ rods has been omitted presumably due to oversight and is seen to have been entered on the 9th page in different ink above the item 240 and after the item 238. This quantity is not taken to monthly abstract of Receipts and has consequently been omitted in the monthly accounts. Such interpolation in the Receipt Register after sending the accounts is a very serious thing inasmuch as such quantities need not have to be accounted for by the Store Keeper at any time unless some one finds it out.

The most difficult task in the verification of the receipts was the reconciliation of the invoices with the entries made in the Receipt Register. The Invoice Numbers are not noted in the Receipt Register. When the Invoices are in tons, the entries in the Receipt Register are in numbers. The accounts of entire quantity of steel had to be extracted in numbers as entered in the Receipt Register and then converted into tons. This reconciliation has taken much of the time of the staff.

The total quantity of steel shown as received in the Receipt Register is Tons 4,457—19—0—16 and issues as per Issue Register is Tons 4159—15—3—19. Out of this issue, Tons 288—13—1—16 have been issued to A.G.'s Office and the balance of Tons 3,871—2—2—3 is stated to have been issued to Vidhana Soudha Works and other Divisions. The closing balance of steel is Tons 298—3—0—25. This has not been verified since the Special Engineer stated that this would take a long time. This explanation cannot be accepted. The Special Engineer should be directed to arrange immediately for the counting of stores.

*Issues.*—It was observed that during April 1953 and May 1953, a quantity of 429 rods of $\frac{5}{8}''\times 18'$ have been issued to the building work to Sri P.V. Somasekhara (4+425). But as per the Issue Register for May 1953, the issue of this item was seen to be 200 only. The subordinate has taken to his account only 200 rods. What has happened to the balance has to be explained.

| | | |
|---|---|---|
| Indent No. 7. | $\frac{3}{8}''\times 14'$ B. 4=84 rods | P. V. Somasekhar. |
| Indent No. 72. | $\frac{3}{8}''\times 11'$ B. 4=84 rods | Vasudeva Chetty. |
| | 168 rods | |

The Issue Register shows an issue of 72 rods against 168 rods. The subordinates have, however, taken the quantity as above in bundles. How the actual issues could have been more than that entered in the Issue Register is not clear.

July 1953—Indent No. 105—194, dated 22nd April 1953 : Coil of 70 lbs :—This quantity is not shown in the Issue Register. The subordinate Sri Vasudeva Chetty has taken this to his account.

*August 1953—Indent No. 63—27, dated 10th August 1953 : Sri Vasudeva Chetty. 5/8" × 5'=60 rods.* The indent is for 16 rods but the issue is shown as 60. The subordinate's account shows a receipt of 16 rods only.

November 1953—Indent No. 81—28, dated 9th November 1953 : Sri P. V. Somasekhar. $\frac{3}{8}''\times 14'\times 5$ bundles. This is not shown as issue but the subordinate has taken it to his account.

Indent No. 238—96, dated 24th November 1953—$1\frac{1}{4}''\times 36'\times 50$. This is not shown as issue. The subordinate has taken it to his account.

Indent No. 104—51, dated 10th March 1954. (Sri P. V. Somasekhar) $1\frac{1}{8}'' \times 36 \times 253$. The issue is shown as 268 which is incorrect as verified from the subordinate's account who has taken 253 rods only.

April 1954—Indent No. 81—2, dated 5th April 1954, Sri Prasad—$1\frac{1}{4}'' \times 48' \times 95$. The indent is approved for 40 rods against which 95 rods are shown as issued in Issue Register. The subordinate has taken to his account only 40 rods.

*Indent No. 188—88, dated 16th July 1954, from Sri P. V. Somasekhar, Supervisor, for issue of 40 tons of $\frac{1}{2}'' \times 36'$ M.S. Rods.*

The relative indent was not forthcoming in the bundle of July 1954, but was found in the bundle for September 1955. In the issue register for July 1954, only an issue of 40 rods weighing Tons 0-8-2-10 is shown as issued. The subordinate has taken to his account a quantity of Tons 22-1-3-2 on 3rd July 1954. The Issue Register for September 1955 (fourteen months later) shows (quoting this indent) the following entries :—

| | | | | |
|---|---|---|---|---|
| M.S. Rods of | $\frac{1}{2}'' \times 38' \times$ | 310 | = | Tons 3-10-1-1 |
| ,, | $\frac{1}{2}'' \times 36' \times$ | 601 | = | ,, 6-8-3-25 |
| ,, | $\frac{1}{2}'' \times 48' \times$ | 300 | = | ,, 4-5-3-15 |
| ,, | $\frac{1}{2}'' \times 18' \times$ | 1541 | = | ,, 8-7-0-25 |
| | | 2752 rods of different sizes. | | Tons 22-11-0-8 |

In all therefore, against the same indent for 40 tons, the following quantities have been issued as shown in the Issue Register :—

| | | |
|---|---|---|
| July 1954 | ... | Tons 0-8-2-10 |
| September 1955 | ... | ,, 22-11-0-8 |
| | | Tons 22-19-2-18 |

As verified from the subordinate's account, he has acknowledged only Tons 22-1-3-2 in July 1954. The subordinate has still to account for the balance.

Apparently against an indent of 40 tons, 40 rods were entered in the I.R. as issued while actually 22 tons 11 cwt. and 8 lbs. were issued. This mistake appears to have been noticed 14 months later when the issue was entered forgetting the earlier entry of 40 rods made in July 1954. This shows clearly that the Issue Register was hopelessly maintained and stocks were not being checked or counted.

October 1954 Indent No. 42—665, dated 30th September 1954, Sri Balakrishna. $1'' \times 36' = 200$. The indent is approved for 71 rods but 200 are shown as issued. The subordinate has taken to his account 71 rods only. What happened to the excess shown as issues, is not clear.

Indent No. 100—188, dated 4th February 1955, Sri P. V. Somasekhar, $\frac{3}{8}'' \times 18'$. This indent is for tons 8-12-2-25 and as against this, 115 bundles weighing tons 5-15-0-0 are shown as issue. As verified from the subordinate's account tons 8-12-2-25 are taken to his account. There is thus a large discrepancy between the materials at-site account and the issue shown. How the subordinate could take eight and odd tons as receipt when only $5\frac{3}{4}$ tons were issued, is not clear.

March 1955 (i) No. 66—194, dated 3rd March 1955, Sri P. V. Somasekhar $5/8'' \times 36' \times 114$.

(ii) No. 64—193, dated 4th March 1955, Sri P. V. Somasekhar

$1—1/8'' \times 40' \times 75$

$1—1/8'' \times 48' \times 108$

$1—1/8'' \times 36' \times 107$

As verified from the subordinate's account, items (i) and (ii) have been accounted for by him in the month of February 1955 while the issue is shown in March in the Issue Register. Secondly, M. S. Section $1—1/8'' \times 40' \times 75$ (*vide* item ii) does not find an entry in the account rendered to A.G. as verified from the abstract of issues. There is thus an omission in the abstract of issues and consequently in the monthly accounts.

May 1955 : Indent No. 369—270, dated 24th May 1955 : Issued to Sri Mohamed Ali $\frac{1}{2}'' \times 36'' \times 5$. This is not shown as issue.

August 1955 : Against Indent No. 226—229, the following are shown as issues :—

(1) $\frac{1}{2}'' \times 35' \times 300$ Sri Channaveerappa (Actually issued to A.G.'s Office but shown against Channaveerappa for R C.C. work and this is written back only in October 1956. The amount is recoverable from the contractor and thus had been completely lost sight of.

(2) $\frac{1}{4}'' \times 36' \times 15$ Sri Veerappa. (A.G.'s Office)

(3) $\frac{3}{8}'' \times 36' \times 15$.

(4) $\frac{1}{4} \times 1{,}050$ lbs. (A.G.'s Office)

All the four items are actually issued to A.G.'s Office during August 1955. Only items (2) and (4) were shown against A.G.'s Office in August 1955.

Item 3 has not been shown as issued in the Issue Register and this is only taken to account during October 1956.

In the bundle of indents for December 1955, Indent No. 461—262, dated 23rd September 1955 of Sri P. V. Somasekhar is found. Although the issues were made in September 1955 they are shown in the Register only in December 1955

$\frac{1}{2} \times 36 = 230$
$\frac{3}{4} \times 36 = 966$ } The indent is complied with during 9/55 but shown as
$1\frac{1}{4} \times 30 = 400$ issue during 12/55.

In other words 48 tons of M.S. rounds issued to the Supervisor in September 1955 is accounted for 3 months later, the omission being in the half-yearly accounting period.

Indent No. 546, dated 20th February 1956 for the issue of M.S. Rods, $\frac{5}{8}'' \times 36' \times 500$.

The issue of 500 M.S. Rods against the above indent made in February 1956 was wrongly noted in the I.R. as 500" of 1" G.I. Pipes. Accordingly the abstract of stock issues was prepared and monthly accounts sent to A.G. wrongly. During March 1956, this mistake seems to have been noticed and an issue of 500 M.S. Rods is shown in the I.R. for March 1956. But the issue of 500' of G.I. Pipes wrongly shown in February 1956 is still remaining unrectified.

It is also observed that the Issue Register for February 1956 bears the correction from G.I. Pipes to M.S. Rods after sending the monthly accounts. No correction should be made after monthly accounts are sent to A.G.

*August 1956.*—Indent No. 207/236, dated 15th November 1954 and 118/236, dated 13th November 1954 for 10 tons of 3/8" M. S. rods: Quoting the Indent of November 1954, an entry in the Issue Register during 8/56 is made for issue of tons 8—14—2—5 of 3/8" M. S. rods. A note from the Store-Keeper is kept in the bundle of Indents for 8/56—this note states that only 200 rods were charged off during November 1954 inadvertently and that the balance is now adjusted. But as verified from the Issue Register for November 1954, it is seen that the full quantity of 200 bundles (*i.e.*, 10 tons) is charged off and also accounted for by the subordinate during November 1954 alone duly adjusting the cost in accounts. How therefore this issue of tons 8—14—2—5 could be the balance for adjusting during August 1956 again is not clear. As verified from the subordinate's account this quantity, *viz.*, 8—14—2—5 is not taken to his account during August 1956.

*June 1956.*—Indent No. 439, dated 8th March 1956 : =100. The indent is corrected from 100 to 50 without attestation but still the issue is shown as 100 rods in the Issue Register. As verified from the subordinate's account only, 50 rods are taken as receipt. Why therefore an excess of 50 rods is shown as issue is not clear.

*February 1955.*—Indent No. 243/171, dated 6th December 1954: 200 bundles of M. S. Rods. 200 bundles of 10 tons of 3/8" M. S. Rounds issued to Sri P. V. Somasekhar, Supervisor during December 1954 is not shown in the Issue Register. It is seen that an entry is made in the Issue Register on 6th December 1954 and struck off. Another item of iron noted in the same Indent is taken to Issue Register during February 1955. But this item of 3/8" of 200 bundles is entirely omitted. The subordinate has accounted for in his materials-at-site account during December 1954.

Regarding the issue of steel, the excess or shortage as seen from the Issue Register and as verified from the indents and subordinate's accounts, a statement is prepared and put up, for which the Special Engineer has to account for. (Document No. 12)

The issue of steel is in much confusion as seen from the entries made in the issue register and corresponding indents, *i.e.*, lot of corrections are made in all these indents A few such corrected indents were verified with reference to the material-at-site account of the concerned subordinates and incorporated in the note. In view of the serious omissions and corrections made in the issue and receipt registers, the exact book balance cannot be arrived at. Hence it is suggested that the entire account of steel should be audited and correct position of the steel account should be established.

## Enclosure to Document No. 11.

*Statement of Steel Sections in respect of which original invoices are not forthcoming for verification in Vidhana Soudha Division.*

APPENDIX I.

| Month | Invoice No. | Office of Supply | Details of M.S. Sections | Quantity |
|---|---|---|---|---|
| 1 | 2 | 3 | 4 | 5 |
| February 1954 | 87 | Controller of Central Stores | $1\frac{1}{8}'' \times 36'$ | 640 |
| Do ... | 97 | Do ... | $1\frac{1}{8}'' \times 36'$ | 236 |
| Do ... | 97 | Do ... | $\frac{1}{2}''$ | 2-3-0-0 |
| March 1954 ... | 184 | Do ... | $\frac{3}{4}'' \times 40'$ | 560 |
| Do ... | 106 | Do ... | $\frac{5}{8}'' \times 20'$ | 215 |
| | | | $\frac{1}{2}'' \times 18'$ | 20 bundles |
| May 1954 ... | 974 | Do ... | $\frac{1}{2}''$ | 4-14-8-0 |
| Do ... | 974 | Do ... | $\frac{3}{8}''$ | 540 |
| Do ... | 1047 | Do ... | $\frac{3}{8}''$ | 0-0-0-27 |
| Do ... | 1047 | Do ... | $\frac{7}{8}''$ | 0-1-3-14 |
| Do ... | 1047 | Do ... | $\frac{5}{8}''$ | 284 |
| | | | $\frac{1}{2}''$ | 450 |
| August 1954 ... | 87 | Do ... | $1'' \times 18'$ | 394 |
| Do ... | 92 | Do ... | $1'' \times 36'$ | 100 |
| Do ... | 100 | Do ... | $1'' \times 36'$ | 140 |
| Do ... | 101 | Do ... | $\frac{3}{4}'' \times 40'$ | 250 |
| Do ... | 124 | Do ... | $\frac{3}{4}'' \times 40'$ | 100 |
| September 1954 | 83 | Do ... | $\frac{1}{2}'' \times 36'$ | 510 |
| | | | $\frac{1}{2}'' \times 36'$ | 250 |
| Do ... | 88 | Do ... | $1\frac{1}{4}'' \times 48'$ | 185 |
| Do ... | 90 | Do ... | $1\frac{1}{4}'' \times 48'$ | 41 |
| Do ... | 94 | Do ... | $\frac{1}{2}'' \times 36'$ | 715 |
| Do ... | 94 | Do ... | $\frac{5}{8}'' \times 48'$ | 180 |
| Do ... | 94 | Do ... | $1\frac{1}{4}'' \times 48'$ | 56 |
| Do ... | 79 | Do ... | $1'' \times 18'$ | 280 |
| October 1954 ... | 40 | Do ... | $1\frac{1}{8}'' \times 36'$ | 30 |
| Do ... | 42 | Do ... | $1\frac{1}{8}'' \times 36'$ | 60 |
| Do ... | 59 | Do ... | $1\frac{1}{8}'' \times 36'$ | 180 |
| Do ... | 65 | Do ... | $1\frac{1}{8}'' \times 36'$ | 120 |
| Do ... | 68 | Do ... | $1\frac{1}{8}'' \times 36'$ | 37 |
| Do ... | 72 | Do ... | $1'' \times 36'$ | 40 |
| November 1954 | 70 | Do ... | $1\frac{1}{4}'' \times 36'$ | 80 |
| Do ... | 99 | Do ... | $\frac{3}{4}'' \times 36'$ | 200 |
| Do ... | 10 | Do ... | $1\frac{1}{8}'' \times 36'$ | 180 |
| Do ... | 14 | Do ... | $1'' \times 36'$ | 150 |
| Do ... | 64 | City Improvement Trust Board. | $\frac{1}{2}'' \times 18'$ | 240 |
| Do ... | 69 | Do ... | $\frac{1}{2}'' \times 18'$ | 53 |
| Do ... | 69 | Do ... | $\frac{5}{8}'' \times 18'$ | 800 |
| Do ... | 70 | Controller of Central Stores | $1\frac{1}{4}'' \times 36'$ | 80 |
| Do ... | 85 | City Improvement Trust Board. | $\frac{5}{8}'' \times 18'$ | 360 |
| Do .. | 85 | Do ... | $\frac{1}{2}'' \times 18'$ | 460 |

APPENDIX I—*concld.*

| Month | Invoice No. | Office of Supply | Details of M.S. Sections | Quantity |
|---|---|---|---|---|
| 1 | 2 | 3 | 4 | 5 |
| May 1955 ... | 55 | Controller of Central Stores | $\frac{1}{2}''\times 48'$ | 1,750 |
| June 1955 ... | 188 | Mysore Iron and Steel Works, Bhadravathi. | $\frac{3}{8}''\times 36'$ | 501 |
| Do ... | 190 | Do ... | $\frac{3}{8}''\times 36'$ | 505 |
| Do ... | 191 | Do ... | $\frac{5}{8}''\times 48'$ | 990 |
| October 1955 ... | 76 | Do ... | $1''\times 36'$ | 233 |
| Do ... | 76 | Do ... | $\frac{7}{8}''\times 36'$ | 434 |
| Do ... | 192 | Do ... | $1\frac{1}{4}''\times 48'$ | 281 |
| Do ... | 193 | Do ... | $1\frac{1}{4}''\times 48'$ | 242 |
| Do ... | 194 | Do ... | $1\frac{1}{4}''\times 36'$ | 460 |
| Do ... | 195 | Do ... | $1\frac{1}{4}''\times 48'$ | 324 |
| Do ... | 196 | Do ... | $1\frac{1}{4}''\times 36'$ | 460 |
| Do ... | 8 | Do ... | $1\frac{1}{4}''\times 48'$ | 68 |
| Do ... | 8 | Do ... | $\frac{7}{8}''\times 36'$ | 580 |
| Do .. | 50 | Do ... | $1\frac{1}{8}''\times 48'$ | 138 |
| Do ... | 50 | Do ... | $1\frac{1}{4}''\times 48'$ | 130 |
| Do ... | 69 | Do ... | $1\frac{1}{4}''\times 48'$ | 152 |
| Do ... | 69 | Do ... | $1\frac{1}{4}''\times 48'$ | 118 |
| January 1956 ... | 146 | Do ... | $\frac{7}{8}''\times 36'$ | 730 |
| July 1956 ... | 47 | Buildings Division, Bangalore. | $1''\times 36'$ | 40 |
| Do ... | 166 | Do ... | $1''\times 36'$ | 30 |
| Do ... | 58 | Do ... | $1''\times 36'$ | 70 |
| Do .. | 157 | Mysore Iron and Steel Works, Bhadravathi. | $1''\times 48'$ | 191 |
| September 1956 | 64 | Buildings Division, Bangalore. | $1\frac{1}{8}''\times 48'$ | 30 |
| Do ... | 72 | Do ... | $1\frac{1}{8}''\times 48'$ | 20 |
| Do ... | 76 | Do ... | $1\frac{1}{8}''\times 48'$ | 17 |
| August 1956 ... | 42 | Mysore Iron and Steel Works, Bhadravathi. | $\frac{7}{8}''\times 36'$ | 730 |
| | 61 | Do ... | $\frac{7}{8}''\times 36'$ | 365 |
| | 9 | Do ... | $1\frac{1}{8}''\times 36'$ | 152 |
| | | | $1\frac{1}{8}''\times 40'$ | 218 |
| | | | $1\frac{1}{8}''\times 48'$ | 42 |

## Document No. 12.

*Statement showing the differences in issues of steel as shown in the stock Issue Register as compared with the Materials-at-site account of the Subordinates.*

| Serial No. | Month | Indent No. | Issues as per Issue Register No. of rods | As received by the Supervisor | Difference | | Remarks |
|---|---|---|---|---|---|---|---|
| | | | | | Issues shown more in the Issue Register | Less | |
| 1 | 4/53 & 5/53 | ..... | $\frac{5}{8}''\times18'\times429$ ... | 200 rods (Sri P. V. Somasekar.) | 229/Cwt. 38–1–15 ... | ..... | ... |
| 2 | 8/53 ... | 63/27, d. 10-8-53. | $\frac{5}{8}''\times5'\times60$ ... | 16 rods (Sri B. V. Chetty.) | 44/Cwt. 2–0–6 ... | ..... | ... |
| 3 | 3/54 ... | 98/51, d. 10-3-54. | $1\frac{1}{8}''\times36'\times268$ ... | 253 rods (Sri P. V. Somasekar.) | 15/Cwt. 16–1–5 ... | ..... | ... |
| 4 | 4/54 ... | 81/2 ... | $1\frac{1}{4}''\times48'\times95$ ... | 40 rods (Sri Prasad) ... | 55/Cwt. 98–0–8 ... | ..... | ... |
| 5 | 7/54 & 8/55 | 188/88 ... | 0—8—2—10 } Tons<br>22—11—0—8 } | Tons 22—1—3—2 (Sri P. V. Somasekar.) | Cwt. 8–2–10 ... | ..... | (*a*) |
| 6 | 10/54 ... | 42, d. 30-9-54 | $1''\times36'\times200$ ... | 71 rods (Sri Balakrishna.) | 129/Cwts. 110–2–25 ... | ..... | ... |
| 7 | 3/55 ... | ..... | $1\frac{1}{8}''\times40'\times75$ ... | ... | ..... | ... .. ... | (*b*) |
| 8 | 5/55 ... | .. ... | ..... | $\frac{1}{2}''\times36'\times5$ (Sri Mohamed Ali.) | ..... | 5/Cwt. 0–1–0–8 ... | ... |

(*a*) As against 40 tons indented in July 1954, M.S. rods of various categories were issued in July 1954 to the extent of Tons 22—11—0—8. But the issue in the I.R. shows only 40 rods weighing 0—8—2—10 and accordingly charged in the monthly accounts. The error is noticed in September 1955 (one year two months later) and the issue to the extent of T. 22—11—0—8 is shown in the I.R. Thus the original entry made in July 1954 is an extra one. The subordinate has accounted for only T. 22—1—3—2 and hence he has to account for the balance quantity *viz.*, 0—9—1—6.

(*b*) Not taken to monthly account of stock issues

Document No. 12.—*concld.*

| Serial No. | Month | Indent No. | Issues as per Issue Register | As received by the Supervisor | Difference | | Remarks |
|---|---|---|---|---|---|---|---|
| | | | | | Issues shown more in the Issue Register | Less | |
| 9 | 8/55 ... | 229, d. 17-6-55 | $1\frac{1}{2}''\times36'\times15$ ... $\frac{1}{4}''$ coils ... 10 ... | A.G.'s Office $\frac{1}{2}''\times36'\times300$ $1\frac{1}{4}''\times36'\times15$ $\frac{3}{8}''\times36'\times15$ Bundles. $\frac{1}{4}''$ coils. 1,050 lbs. | ..... | [$\frac{1}{2}''\times36'\times300$ $\frac{3}{8}''\times36'\times15$ Bundles. —not taken to the totals.] | (c) |
| 10 | 12/55 ... | About 48 tons of M.S. Rounds issued to Sri P. V. Somasekhar, Supervisor, in September 1955 is accounted for during December 1955 three months later, the omission occurring during half-yearly counting period. | | | | | |
| 11 | 2/56 ... | 546, d. 20-2-56 | 500′ of 1″ G.I. Pipes... | ..... | 500′ of 1″ G.I. Pipes. | ..... | ... |
| 12 | 8/56 ... | .. ... | T. 8—14—2—5 ... | ..... | T. 8–14–2–5 ... | ..... | (d) |
| 13 | 6/56 ... | 439, d. 8-3-56 | $1\frac{1}{4}''\times48'\times100$ ... | $1\frac{1}{4}''\times48'\times100$ ... | 50 rods T. 4–9–1–18... | ..... | (e) |
| 14 | 2/55 ... | ..... | ..... | $\frac{3}{8}''\times36'\times10$ tons (Sri P. V. Somasekar.) | | 10 tons ... | (f) |
| | | | | (Cost is about Rs. 15,000+Rs. 550 Total Rs. 15,550.) | T.26–18–0–8 and 500′ 1″ G.I. Pipe | T. 10–1–0–8 cost is about Rs. 5,600 | |

(c) It is seen that 300 rods of $\frac{1}{2}''$ and 15 bundles of $\frac{3}{8}''$ issued to A.G.'s office in 8/55 along with other sizes are omitted in the account of M/s. Kempiah & Sons. These 300 rods have been shown as issued to Sri Channaveerappa, Supervisor wrongly. During October 1956, there is a write-back from Channaveerappa's account to A.G.'s Office. The $\frac{3}{8}$ rods are also shown as issued in the month of October 1956 (*Vide* pages 33 and 35 of I.R.)

(d) Quoting an indent pertaining to 11/54, this issue is shown during 8/56. It is verified that the indent referred to has been fully accounted for already during 11/54.

(e) There is an excess of 50 rods in the I.R. (f) The issue of these 10 tons to the subordinate is omitted in the I.R.

Shown to the Witness No. 19 on 27th November 1956 and referred to in his evidence (Para 14) today.

(Sd.) P. P. DEO,
*Chairman*, 28-11-1956.

CHAPTER XIII (*e*)—ANNEXURE XIX.

Statement showing the difference in value between the accounts balance and balances as per half-yearly return of stock taking for the half-year ending.

| Sl. No. | Nomenclature | March 1954 (Stores) | September 1954 (Stores) | March 1955 (Stores) | September 1955 (Stores) | March 1956 (Stores) |
|---|---|---|---|---|---|---|
| 1 | Cement ... ... | 36,739 | 35,020 | 4,363 | 9,830 | 31,352 |
| 2 | M. S. Rounds, M. S. Flats, Angles, Channels, G. I. Materials, etc. | 1,09,036 | 2,29,605 | 4,04,493 | 5,20,416 | 4,63,414 |
| 3 | Lorry Spares ... | ... | 11,922 | 15,376 | 15,921 | 28,264 |
| 4 | Timber ... ... | Not taken to stock register at all, though the value of timber paid for has been debited to stock. | | | | |
| 5 | Scaffolding and centering materials. | ... | 20,253 | 23,715 | 31,868 | 33,131 |
| 6 | Oils and Lubricants ... | 85 | 220 | 11,430 | 6,182 | 12,687 |
| 7 | Miscellaneous ... | 38,757 | 1,49,694 | 1,11,235 | 3,23,901 | 2,98,258 |
| 8 | Sanitary and Water Supply ... | ... | ... | 78,268 | 73,568 | 74,195 |
| | Total as per return of counted balances. | 1,84,617 | 3,46,714 | 6,48,380 | 9,81,686 | 9,41,301 |
| | Total as per monthly accounts. | 2,96,924 | 3,13,339 | 8,98,847 | 12,40,792 | 12,91,290 |
| | (—) Deficit or (+) surplus ... | —1,12,307 | +33,375 | —2,49,967 | —2,59,106 | —3,49,809 |

Physical verification of stock articles of Vidhana Soudha division as on 22nd October 1956.

| | Name of the article | Unit | Receipts | | | | Issues | | | Differences | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | Closing Balance as on 31st March 1956 as per Books | Counted Balance as per half-yearly statement ending 31st March 1956 | Receipts up to 22nd October 1956 | Total Receipts | Total Issues | Closing Balance taking counted Balance on 31st March 1956 | Counted Balance as on 22nd October 1956 | More | Less |
| 1 | Cement ... | Bags. | 6,382 | 2,732 | 42,197 | 44,929 | 45,720 | (-) 791 | 1,507 | 2,298 | ... |
| 2 | White cement ... | Lbs. | 4,148 | 4,138 | 1,34,168 | 1,38,306 | 1,37,936 | 370 | 2,156 | 1,786 | ... |
| 3 | A.C. Plain Sheets 8×4×3/16". | No. | 166 | 166 | 52 | 218 | 47 | 171 | 5 | ... | 166 |
| 4 | G.I. Bends 4" ... | No. | 1 | 1 | 4 | 5 | ... | 5 | ... | ... | 5 |
| 5 | G.I. Bends 5" ... | No. | 6 | 6 | ... | 6 | ... | 6 | 6 | ... | ... |
| 6 | Blue Long Cloth ... | Yard. | 4 | 4 | 20 | 24 | 17 | 7 | 6 | ... | 1 |
| 7 | Gold Paint ... | Gln. | 7/8 | 7/8 | 2 5/8 | 3½ | 3 | 1/2 | ... | ... | 1/2 |
| 8 | Coir Rope ¼" ... | Lbs. | 10,852 | 10,752 | 1,01,920 | 1,12,672 | 1,06,770 | 5,902 | 440 | ... | 5,462 |
| 9 | Copper Sheets 8 ×4×18 gauge. | Nos. | 253 | 353 | ... | 253 | 6 | 247 | 255 | 8 | ... |
| 10 | Aluminium Sheets 8×3×18 guage. | Nos. | 18 | 18 | ... | 18 | 26 | (—) 8 | 58 | 66 | ... |
| 11 | Synthetic Enamel Grey Paint. | Gln. | 100 | 100 | 200 | 300 | 105 | 195 | 75 | ... | 120 |
| 12 | Synthetic Enamel White. | Gln. | ... 2 | ... 2 | 76 7/8 ... | 76 7/8 2 | 72 ... | 4 7/8 2 | 14 4 | 9 1/8 2 | ... ... |
| 13 | G.I. Bends 3" | No. | | | | | | | | | |
| 14 | Lorry Tyres 34"×7" ... | No. | 32 | 32 | ... | 32 | 18 | 14 | 14 | ... | ... |

| Name of work | No. III Sub-Division | | | | | |
|---|---|---|---|---|---|---|
| | B.R. No. and date | Rate | B.R. No. and date | Rate | B.R. No. and date | Rate |
| | | Rs. a. p. | | Rs. a. p. | | Rs. a. p. |
| Size stone masonry for superstructure 1 : 4 C.M. | 820/4—6—54 | 1 5 9 | 282/28—4—54 | 2 0 2 | 408/6—5—54 | 1 6 0 |
| | Do | 1 8 9 | do | 1 5 6 | do | 1 9 3 |
| | 883/12—6—54 | 2 1 0 | do | 1 9 8 | do | 1 15 9 |
| | 952/18—6—54 | 1 10 6 | ... | ... | ... | ... |
| Do 1 : 3 C.M. | 820/4—6—54 | 2 3 0 | 282/28—4—54 | 2 0 4 | 408/6—5—54 | 1 8 0 |
| | ... | ... | ... | ... | do | 2 2 6 |
| | 1051/25 6—54 | 2 6 0 | 211/23—4—54 | 2 2 9 | 529 14—5—54 | 2 3 0 |
| R.C.C. Lintels ... | 837/4—6—54 | 2 4 0 | 951/18—6—54 | 2 6 0 | 869/11—6—54 | 2 4 0 |
| | ... | ... | ... | ... | 1050/25—6—54 | 2 4 9 |
| R.C.C. Bearing Slab ... | 838/4—6—54 | 3 11 0 | 282/28—4—54 | 3 10 0 | ... | ... |
| R.C.C. Cills ... | 838/4—6—54 | 3 11 0 | 282/28—4—54 | 3 7 0 | 135/15—4—54 | 3 7 0 |
| | 156/17—4—54 | 2 14 0 | 238/24—4—54 | 3 3 1 | ... | ... |
| R.C.C. Bearing slab with J. Bolts. | 838/4—6—54 | 3 0 0 | 652/21—5—54 | 3 4 3 | ... | ... |
| Bar bending and fabrication | 699/28—5—54 | 2 3 11 | 544/15—5—54 | 2 4 0 | 652/21—5—56 | 2 6 0 |
| Do | 423/7—5—54 | 2 3 6 | 78/9—4—54 | 1 15 11 | 156/17—4—54 | 2 0 0 |

| | | | | |
|---|---|---|---|---|
| Setting in 1 : 3 C.M. Cyma reverse slabs $1\frac{3}{4}' \times 1\frac{1}{2}'$ size. | 1051 / 25—6—54 | 5 12 9 | 952 / 8—6—54 | 5 9 10 |
| R.C.C. roofing 1 : 2 : 4 6" thick. | 2024 / 1—10—54 | 576 12 0 / 3—62 | | = 150 8 0 |
| 1 : 1 : 2 R.C.C. Beams. | Do | 1,314 4 0 / $130\frac{1}{2}$ | | = 10 0 0 |
| Cement plastering 1 : 4 C.M. $\frac{1}{2}$" thick. | 2597 / 3—12—54 | 1,392 8 0 / $220\frac{1}{2}$ | | = 6 5 0 |
| | 2007 / 30—9—54 | 4 12 0 | | |

| Name of work | No. I Sub-Division | | | No. IV Sub-Division | | |
|---|---|---|---|---|---|---|
| | B.R. No. and date | Rate | B.R. No. and date | Rate | B.R. No. and date | Rate |
| | | Rs. a. p. | | Rs. a. p. | | Rs. a. p. |
| Size stone masonry for superstructure 1 : 4 C.M. | 19/2—4—54 | 1 9 6 | 217/26—8—54 | 1 11 0 | ... | ... |
| | ... | ... | ... | ... | | |
| | 945/17—6—54 | 1 7 0 | ... | ... | | |
| | 1314/17—7—54 | | | | | |
| Do 1 : 3 C.M. | ... | ... | ... | ... | 1532/6—8—54 | 1 8 3 |
| | ... | ... | ... | ... | ... | ... |
| | ... | ... | ... | ... | 1595/12—8—54 | 1 10 6 |
| | | | | | do | 2 15 3 |
| | | | | | 1786/3—9—54 | 1 10 1 |
| R.C.C. Lintels ... | 1549/7—8—54 | 4 1 3 | | | 344/30—4—54 | 3 9 0 |
| | ... | ... | ... | ... | ... | ... |
| R.C.C. Bearing Slab ... | ... | ... | | | 2015/1—10—54 | 3 0 9 |
| R.C.C. Cills ... | 1549/7—8—54 | 3 1 6 | ... | ... | 2804/29—12-54 | 4 0 0 |
| | ... | ... | ... | ... | ... | ... |
| R.C.C. Bearing slab with J. Bolts. | ... | ... | ... | ... | ... | ... |
| Bar bending and fabrication | 1768/3—9—54 | 2 1 2 | 2079/9—10—54 | 2 3 9 | ... | ... |
| Do | 2021/1—10—54 | 2 5 4 | | | | |

| | | | | | | |
|---|---|---|---|---|---|---|
| R.C.C. roofing 1 : 2 : 4 6" thick. | 2186 / 22—10—54 | 1,427 8 0 / 7·28 | = 196 2 6 5" thick. | 2715 / 16—12—54 | 4970 / 31 | =168 0 0 |
| 1 : 1 : 2 R.C.C. Beams | 1768 / 3—9—54 | 3,119 7 0 / 14·56 | = 190 0 0 | 1534 / 6—8—54 | 7614 / 135 | = 5 10 2 |
| Cement plastering 1 : 4 C.M. $\frac{1}{2}$" thick. | 2079 / 9—9—54 | 2,811 0 0 / 1—4—56 | = 123 1 0 | R.C.C. Beams. | | |
| | | | | 2094 / 11—10—54 | 145 12 0 / 24·8 | = 5 14 0 |

*Details of Nominal R.M.S. Showing excess issue of Materials :—*

A. B. R. No. 169—Vouchers for July 1953.

Nominal Roll for the period from 26th June 1953, to 2nd July 1953, for size stone in cement mortar 1 : 6 foundation of Vidhana Soudha :—

| | | |
|---|---|---|
| Quantity of masonry ... | ... | 4,796 C.ft. |
| Issue of cement bags as per Nominal Roll | ... | 317 |
| In the Measurement Book it is allocated as follows.— | | |
| Masonry ... ... | ... | 280 bags. |
| Cement pointing ... | ... | 37 ,, |
| | | 317 bags. |

In this case there is no separate measurement noted in the measurement book No. 2787—page 17 for such works.

Without noting the number of squares for which cement pointing is done, and even without noting the proportion etc., the allocation noted in the measurement book for having used 37 bags of cement for pointing cannot be taken as correct. Sand used for masonry and other works as per roll is 45 c.yds; as per measurement book it is shown as 60 c.yds for total and for masonry 45 c.yds.

Comparing the usage of cement and sand for masonry work, it works like this :

| | *280 bags of cement.* | *Sand.* |
|---|---|---|
| (*a*) | $280 \times 1{\cdot}25 = 350$ C.ft. | $\frac{45 \times 27}{1,215}$ C.ft. |
| (*b*) | $\frac{350 \times 6}{2,100}$ C.ft. | But actually only 45 cyds. of sand or 1,215 C.ft. have been used. |

(*a*) For converting quantity of cement in a bag to C.ft.

(*b*) For one C.ft. of cement, six C.ft. of sand is to be used. So the sand to be used should be.—2,100 C.ft.

The issue of Cement has therefore no relation to the issue of sand. The percentage of mortar, taking the cement bags into consideration works out $\frac{(2,100 \times 100)}{4,796}$ to 44·5 per cent. This is far in excess of the mortar percentage used in size stone masonry *viz.*, 25 to 30 per cent. Taking the quantity of sand as the basis, only 162 bags shomld have been issued. This would work out also to 25 per cent. There is a clear excess issue of 118 cement bags and about 28 bags under cement pointing.

Regarding the mode of recording the measurements, the correct method of recording should have been to allocate different pages in different measurement books for each section and record the measurements in a chronological order so that the checking could be easy and fool-proof. In such a case, the levels reached previously could be seen very clearly.

*Page 20 in Measurement Book No.* 2759.—Rear Wing Central Wall :— The level reached is 115·17. In the very next roll, this level should be the commencement, whereas it is commenced from 108·5 as recorded in page 23 of the same measurement book. Evidently there has not been any kind of check done in the Accounts Branch in these directions, *viz.*—

(1) Recording of measurements—checking of previous levels, etc.
(2) Check over the issue of materials.
(3) Check over the working cost then and there, thereby controlling any extra cost in labour.

B. VOUCHER BUNDLE FOR JULY 1953.

B. R. No. 150 of 30th June 1953.

N. R. for the period from 19th June 1943 to 25th June 1953 :

(for the work, size stone in cement mortar 1 : 6 foundation)

Masonry progress : 7,200 C.ft.

Cement used is 348 bags. No separate measurement or allocation is given for cement pointing. Sand used is 80 c.yds.

| *Cement* | *Sand.* |
|---|---|
| $348 \times 1{\cdot}25$ | |
| 435 | |
| $435 \times 6$ | $80 \times 27$ |
| 2,550 | 2,160 |

Issue of sand and cement do not tally with each other.

Taking the use of sand into consideration (which works out to 30 per cent of masonry), there is a clear excess issue of 60 bags cement in this roll. As noticed previously, the records of levels of various sections have not been checked in the Accounts Branch :

Comparative Statement of Materials used and as required in some of the Nominal rolls.
No. 4 Sub-division, for the month of March 1956.
Name of work: Laying cement concrete (R. C. C.) of Main dome.

| B. R. No. and date | Name of Supervisor | Progress of work | Proportion of materials used | Materials Required | | | Materials used | | | Jelly used C.ft. | Percentage of bulkage taking Jelly into consideration |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | Cement bags | Sand C.yd. | Jelly C.yd. | Cement bags | Sand C.yd. | Jelly C.yd. | | |
| | | C.ft. | | | | | | | | | |
| 4973/Mar. 1956 | Sri H. T. Honnurappa. | 2,351 | 1:1:2 | 783 | 35 | 70 | 400 | 50 | 80 | 2,160 | 9% |
| Rs. 5,537 9 0 | | 3,279 | 1:1:2 | 1,093 | 49 | 98 | 1,000 | 70 | 100 | 2,700 | 21½% |
| 5109/Mar. 1956 | Do | 850 | 1:2:4 | 141 | 13 | 25 | 121 | 16 | 31 | 837 | Equal |
| Rs. 5,655 2 6 | | 1,503 | 1:1:2 | 500 | 23 | 45 | 700 | 50 | 80 | 2,160 | Excess |
| 5329/Mar. 1956 | Do | 2,956 | 1:1:2 | 985 | 44 | 88 | 1,200 | 80 | 120 | 3,240 | Excess† |
| Rs. 4,949 9 6 | | | | | | | | | | | |
| O.T. | | | | | | | | | | | |
| Rs. 1,194 3 6 | | | | | | | | | | | |
| 5442/Apr. 1956 | Do | *2,844 | 1:1·2 | 948 | 43 | 85 | 1,100 | 75 | 110 | 2,970 | Excess |

20 per cent has been deducted from the total progress in each case for bulkage and the materials required are calculated for the balance.

Laying 1 : 1 : 2 cement concrete (R.C.C.) of main dome between R.L. 198.92 to 202.92 area of octagon = $\frac{1}{2} \times 25 \times 31 \times 8 = 3100$ ($\frac{1}{2}B \times 1 \times 8$).

Area of Inner Circle $= 22/7 \times 27 \times 27 = 2289$ ($1\pi r 2$).

Hence quantity of concrete laid between R L. 198.92 to 202.92 $= 711 \times 4 = 2844$.

(This should be 811 and not 711. Hence concrete laid will be $811 \times 4 = 3244$.)

Note :—(1) Progress of work noted in the Nominal Roll differ from the progress noted in the Measurement Book, thus 'C' Register postings would be erroneous, *vide* figures in the B R. Nos. 4973 and 5329.

(2) Even the measurement books show wrong calculation as seen on page 23 of Measurement Book No. 459 wherein 3100 – 2289 is exhibited as 711 instead of 811. This has resulted in ($100 \times 4' = 400$), 400 cft. of R.C.C. work less.

(3) In some of the B.Rs. noted above, cement, sand and jelly used are far in excess over the actual quantities required. In some cases, the quantities used do not bear the proportions they are stated to have been mixed up with. For example, for a progress of 1,503 cft. deducting 20 per cent for bulkage, 1,203 cft. of jelly would be necessary and 601 cft. each of sand and cement. Against this they have used 2,160 cft. of jelly, 1350 cft. of sand and 875 cft. of cement.

*Whether this is 2,844 Cft. or 3,241 Cft. is to be certified by the concerned Executive Engineer in as much as there is an important error in the measurement book (on page 23—M.B.No. 459).

†The quantity of R.C.C. work done is less than jelly used.

## 12(*a*) Statement of cash advances taken by S.D.Os. and amounts cleared during the month in Vidhana Soudha Division for the year 1955-56.

| Month | S.D.O. 6 | | | | S.D.O. 2 | | | | S.D.O. 4 | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | Opening Balance | Advanced during the month | Amount cleared | Closing Balance | Opening Balance | Advance | Clearance | Closing Balance | Opening alance | Advance | Clearance | Closing Balance |
| 1955 | Rs. a. p. | Rs. a. p. | Rs. a. p. | Rs. a. p. | Rs. a. p. | Rs. a. p. | Rs. a. p. | Rs. a. p. | Rs. a. p. | Rs. a. p. | Rs. a. p. | Rs. a. p. |
| January ... | 1,000 0 0<br>+ 268 0 0 | 1,670 0 0 | 1,888 0 0 | 1,056 0 0 | 2,391 8 3 | 8,009 4 0 | 10,072 15 9 | 327 12 6 | 5,506 1 0 | 21,631 8 0 | 27,037 0 0 | 0 9 0 |
| February ... | ... | 1,175 10 0<br>+2,500 0 0 | 144 2-0 | 4,587 8 0 | ... | 9,626 15 9 | 9,334 0 3 | 620 12 0 | ... | 24,584 9 0 | 24,582 1 0 | 3 1 0 |
| March ... | ... | 5,361 5 0 | 1,557 8 0 | 8,391 5 0 | ... | 13,222 15 0 | 12,688 1 0 | 1,105 10 0 | ... | 25,331 11 0 | 25 347 0 0 | 37 12 0 |
| April ... | ... | 4,648 12 0 | 868 12 0 | 12,171 5 0 | ... | 8,771 15 0 | 9,613 0 6 | 294 8 6 | ... | 35,9-4 14 0 | 36,015 4 0 | 4 6 0 |
| May ... | ... | 4,966 6 0 | 716 6 0 | 16,421 5 0 | ... | 10,786 15 0 | 10,653 2 0 | 428 5 6 | ... | 41,044 15 0 | 41,043 4 6 | 6 0 6 |
| June ... | ... | 7,264 0 0 | 516 10 0 | 23,168 11 0 | ... | 11,643 1 0 | 9,866 9 6 | 2,204 13 0 | ... | 41,116 8 6 | 41,121 7 0 | 1 2 0 |
| July ... | ... | 12,180 6 0 | 4,439 6 0 | 29,399 11 0 | ... | 16,682 10 6 | 18,432 0 6 | 455 7 0 | ... | 56,717 15 0 | 56,697 15 6 | 21 1 6 |
| August ... | ... | 9,123 10 0 | 2,904 0 0 | 35,619 5 0 | ... | 13,824 15 6 | 13.846 7 3 | 333 15 3 | ... | 46,586 5 6 | 46,602 13 0 | 4 10 0 |
| September ... | ... | 10,503 12 0 | 5,349 11 0 | 40,773 6 0 | ... | 16,807 14 6 | 13 572 4 6 | 3,569 9 3 | ... | 52.254 1 6 | 52,254 3 6 | 4 8 0 |
| October ... | ... | 12,355 2 0 | 13,204 8 6 | 39,923 15 6 | ... | 16,-86 14 0 | 16,970 6 0 | 2,8-6 1 3 | ... | 69,070 0- 6 | 69,063 6 6 | 11 2 0 |
| November ... | ... | 8,501 8 0 | 1,468 8 0 | 46,956 15 6 | ... | 17,493 6 6 | 11,4-4 10 6 | 5,8.4 13 3 | ... | 52,704 11 6 | 52.711 10 6 | 4 3 0 |
| December ... | ... | 10,664 2 0 | 12,935 0 0 | 44,686 1 6 | ... | 24,169 2 6 | 21,768 12 0 | 8,305 3 9 | ... | 68,941 13 6 | 68,939 9 0 | 6 7 6 |
| 1956 | | | | | | | | | | | | |
| January (Tuesday) ... | ... | 8,704 13 0 | 1,801 5 0 | 52,089 9 6 | .. | 20,680 7 0 | 19,028 1 0 | 9,957 9 9 | ... | 64,956 6 6 | 64.907 6 0 | 56 8 0 |
| February (Wednesday) | ... | 9,175 11 0 | 11,261 2 6 | 50,004 2 0 | ... | 28,633 12 6 | 19,493 6 6 | 19 097 15 9 | ... | 69 538 1 0 | 69 575 5 6 | 18 3 6 |
| March (Saturday) ... | ... | 11,241 14 0 | 38,492 8 6 | 22,753 7 6 | ... | 30,736 0 6 | 37,870 7 6 | 11,' 63 8 9 | ... | 82,742 2 0 | 65.003 13 0 | 17,756 8 6 |
| April (Monday) ... | ... | 9,888 6 0 | 1,188 6 6 | 31,453 7 6 | ... | 34,226 7 6 | 25,109 9 0 | 21,080 7 3 | ... | 82,256 3 0 | 66.975 8 0 | 33,037 3 6 |
| May (Thur-day) ... | ... | 11,963 2 0 | 11,191 3 4 | 32,231 6 2 | ... | 27,805 1 0 | 31,900 5 6 | 16,9-5 2 9 | ... | 91,648 15 6 | 1,20,165 9 0 | 4,521 10 0 |
| June (Saturday) ... | ... | 11,536 13 0 | 1,136 13 0 | 42,631 6 2 | ... | 47,920 5 0 | 40,607 1 0 | 24,298 6 9 | ... | 64,489 3 0 | 56,897 12 6 | 12,113 9 6 |
| July (Tuesday) ... | ... | 48,378 11 0 | 58,311 15 5 | 32,698 1 9 | ... | 30,686 2 0 | 36,790 6 0 | 18,094 2 9 | ... | 50,159 11 6 | 57.151 6 0 | 5,421 6 0 |
| August (Friday) ... | ... | 50,446 0 0 | 60,961 0 4 | 22,183 1 5 | ... | 25,414 4 0 | 38,371 3 0 | 5,137 3 9 | ... | 38,412 13 6 | 35,135 0 6 | 8,699 3 0 |

## CHAPTER XV (*a*)—ANNEXURE XXIV—(*ii*).

Copy of letter No.1169/VS. dated 8th January 1954 from the Special Engineer, Vidhana Soudha Division, Bangalore, to the Chief Engineer of Mysore, Bangalore.

*Reg:* Performance of Dodge 5—7-ton Trucks

As desired by Secretary, Stores Purchase Committee, for testing the above trucks arrangements were made to test one of the above Trucks.

First day it was taken to Bettahalsoor Quarry and loaded with 80 Size Stones $2' \times 10\frac{1}{2}'' \times 9''$ which is one and half times the normal load put on Desoto 4 Ton Trucks. (About 100 C.ft. Granite Stone). On no load the Vehicle gave a mileage of 14 Kilometres per gallon or 8 miles per gallon and on loads journey an average of 7 miles per gallon was secured.

Second day the truck was taken to Hesaraghatta Quarry for trial where about 4 miles of road is bad being I.V.C., unmetalled road and quarry road. On no load journey the Vehicle gave a mileage of 8 miles per gallon. It was loaded with 4 slabs of $12' \times 2' \times 1\frac{1}{8}'$ approximately, 100 C.ft. on the return journey. It gave an average of six miles per gallon. Thus even under severe conditions the vehicle gave an average of 7 miles per gallon for combined no load and loaded journey. At present 24 new chassis are supplied out of 24 lorries allotted to this division.

The above Trucks are provided with Steel cabins and Steel reinforced Wooden bodies. The bodies require some modification to adopt them for heavy duty in this Division. The same will be done in this office which may cost Rs. 300 each. Thus the over all cost of this 5-7 Ton Trucks will be less by about Rs. 1,500. I propose 12 Trucks of this type may be purchased for transport work to this Division, and eight of 4 tons Dodge Chassis received from the Police Department may be transferred to other Divisions for use.

Solicit immediate orders in the matter.

(Sd.) LAKSHMINARAYAN,
For *Chief Engineer of Mysore*
*29-1-1954*

## CHAPTER XV (a)—ANNEXURE XXV.

OFFICE OF THE CHIEF ENGINEER OF MYSORE,

No. 9970 *Bangalore, Dated 29th January 1954.*

To

The Secretary to Government,
Public Works Department, Bangalore.

*Sub*: Lorries for Public Works Department.

Sir,

Government in their order No. P.W. 6513-14-B. 4-53-26 dated 26th October 1953 sanctioned the purchase of 36 lorries (including 10 Water lorries); Orders for these were placed, through the Stores Purchase Committee with Messrs. The Premier Automobiles, Ltd., at a cost of Rs. 14,038-8-0 each. Out of them 24 lorries were made available for the Vidhana Soudha works. But the Special Engineer in charge of the Vidhana Soudha Works finds that Military Trucks of 5-7 ton capacity would be more useful and economical. A copy of his letter No. 1169 dated 8th January 1954 in the matter, herewith enclosed, may be perused. He has suggested that the Military Trucks with Sri Shiva Rao Devaram Ubhayakar which are available for purchase at Rs. 13,825 each could be taken over with advantage. The possibility of cancelling a part of the orders placed with Messrs. The Premier Automobiles so that 12 Military trucks could be obtained against the sanction for 36 lorries was suggested to the Stores Purchase Committee. It is learnt that it would not be possible.

Government in their order No.P.W.8208-R.B.4-53-31 dated 7th December, 1953 have sanctioned the purchase of diesel lorries. Quotations for the same have been received through S.P.C. The diesel lorries are required for the general use of this Department and it is not possible to purchase 12 heavy petrol lorries against this sanction for diesel lorries, without adversely affecting the progress of works in other Divisions.

Therefore it is necessary to purchase twelve Military trucks of 5 to 7 tons capacity at Rs. 13,325 each; and the total cost will be Rs. 1,65,900. This can be found from sanctioned grants as explained below. In the note dated 20th November, 1953 regarding grants, it has been mentioned that out of Rs. 10·0 lakhs under 68-I-N. E. D. 4.00 lakhs would be required for earth moving equipment and 5·00 lakhs for lorries. It is now seen that the Earthmoving equipment casts only 3·00 lakhs, thus leaving a balance of Rs. 2·00 lakhs. Government have recently sanctioned the purchase of Letourneau earth moving equipment, estimated to cost 2·31 lakhs. But as quotations have not yet been called for, they cannot be received and paid for during 53-54. Therefore the cost of the Military Trucks now proposed can be found from this source. No additional grant will be necessary.

As the Military trucks with Sri Shivarao Devarao Ubhayakar have been tested and found good, as they are ready for use with steel cabins and steel reinforced wooden bodies and as they cost only Rs. 13,825 each as against the cost of Rs. 14,038-8-0 per mere chassis to be supplied by Messrs. The Premier Automobiles, I request that sanction of Government to purchase 12 trucks directly without reference to S.P.C., may kindly be communicated early, as they are urgently required for Vidhana Soudha works.

Yours faithfully,

(Sd.) K. S. GANGADHARA
*Chief Engineer of Mysore.*

**CHAPTER XV (*a*)—ANNEXURE XXVI.**

BANGALORE, INDIA

L.No P/PWD/1/1954. *2nd February 1954.*

To

*The Chief Engineer,*
Public Works Department,
Government of Mysore, Bangalore.

*Sub*:—Dodge T-234 Type Five-ton Heavy duty, Trucks.

Dear Sir,

I have pleasure in offering to your goodself the above Trucks for delivery from stocks, subject to prior sale. I am furnishing hereunder detailed technical specifications of the same, and also my quotations.

*Specifications* 'Dodge' T-234 Five-ton Truck heavy duty type, six-wheeler, Right Hand Drive, powered by a six-cylinder side valve petrol engine, Wheelbase 168 inches, Tyre size 10.00X 20" with Dual rear wheels complete with beautifully finished Factory-built all-steel cabin with winding glasses and Factory-built Load carrying platform built solidly out of wood and steel.

These trucks are unused Surplus ex-military vehicles. These are, as you are doubtless aware, built much more sturdily than their civilian counterparts and will carry with safety more than the normally available civilian chassis.

*Quotations.* 'Dodge' T-234 five-ton truck (six-wheeler heavy duty type) generally as described herein—Rs. 13,825 (Rupees thirteen thousand eight hundred and twenty-five only) Each. Nett, delivered at Bangalore. Sales Tax, if any, will be extra.

The vehicle will be supplied with one spare rim only without tyre or tube and a standard set of tools comprising of—one jack and handle, one wheel wrench, one pump, two tyre levers, one starting handle and one tool bag.

The price includes a beautifully finished Factory-built All-steel Driver's Cabin and a Factory-built Load carrying Platform built of steel and lined with wood.

*Model and year of Manufacture.*—The model offered is the Dodge Type T-234. I understand that this model was first brought into production sometime about the year 1943 and has been in production right up to about a couple of years ago when it was being made for the use of the United Nations Forces in Korea and civilian use in America and other countries and that the vehicles in question were bought by the Hyderabad Government at the time of the Police action in that State, after which the Government of India took them over and offered them for sale through the Disposals Department. As such it would be very difficult for me to give the exact year of manufacture. But in all good faith, I feel I would be right in believing that these vehicles were manufactured in the years 1948-49.

*Spare Parts.*—I can supply you with spares from immediate stocks. A short list of spares with their respective prices is enclosed herein for your kind perusal. You will note from this list that our prices are very favourable—that they are in most cases equal to or less than the prices of the corresponding parts of lighter vehicles currently offered on the market, in spite of the fact that our spares are very much sturdier and are built for heavier duty.

Further, many of the parts which require frequent renewals like ignition parts, Brake parts, Carburettor parts, and other parts standardised by the Society of Automobile Engineers (S.A.E., are interchangeable with the Civilian model spare parts.

*Prices of Spares.*—As far as parts which we have in stock are concerned, we assure you that the prices as quoted in our attached list will not be enhanced for a period of at least one year from date.

*Mode of Payment.* On the sale of the vehicles only, I am prepared to accept payment as follows.

95% of the value in full of my bill together with the amount of Sales Tax Payable on the full value, to be paid upon delivery of vehicles to you and the balance of 5% of my bill to be paid immediately after the expiry of ninety days from the date of the relative bill.

*Guarantee and Service.*—As usual with new vehicles, a normal-Guarantee for all defects in workmanship and material is offered for a period of ninety days or 4,000 miles, whichever is earlier, from the date of registration, except for Proprietory Parts, Tyres and Tubes which are not covered.

Service and maintenance facilities will be extended at Bangalore free of charge for a period of six months from the date of delivery of the vehicles. Materials consumed, however, will be charged for, as is usual.

*Delivery.*—Delivery from stocks as soon as possible within one to two weeks from the date of receipt of your firm order. I have in stock one vehicle in Bangalore available for inspection. Total stocks held are forty-six vehicles at the moment.

Summing up, these vehicles have the following advantages:—

(1) Delivery from stocks.

(2) Bodies and Platforms are included in the price quoted, these two *i.e.*, the Driver's Cabin (all steel) and the load carrying platform cost nothing less than Rs. 4,000 to Rs. 5,000 if locally built. In other words, these vehicles are offered inclusive of the above mentioned Cabin and Platform at a price *lower* than that of a *mere* chassis of the lighter type WITHOUT BODY OR CABIN. I may further add that the present value of such a heavy duty vehicle if at all available on the market, would be nothing less than Rs. 21,000 to Rs. 24,000.

(3) Being already provided with Bodies and Cabins, valuable time and expense which would otherwise have to be incurred, is saved.

(4) The Ton-Mile figure of these vehicles is considerably higher than that of the vehicles normally available today.

(5) The Ton-mileage per tyre should also be greater by virtue of the fact very large section heavy duty tyres are used.

(6) A sturdier vehicle than most normal five ton trucks commercially available at the moment.

(7) The vehicle is offered at a price which is immensely favourable.

I have pleasure in informing you that thorough test was conducted by the Public Works Department (Vidhana Soudha Division) on the above vehicle. The vehicle carried with ease a load of approximately 120 cubic feet of granite weighing nearly 18,000 pounds over a test mileage of nearly forty-two miles, twenty-eight miles of which was pukka road and fourteen miles of which was over a Bullock-cart track unfit for vehicles. The petrol consumption worked out at an average of over 7½ miles per gallon. This confirms the fact that the Ton-Mile figure is extremely good and satisfactory.

*Colour and Body.* I hereby offer to paint these vehicles in any standard shade of colour at the time of delivery, free of charge, if so desired by you.

Any minor modifications to the load carrying Platform will also be effected if need be, free of charge.

Trusting to be favoured with your esteemed orders and assuring you of my best services and sincere co-operation at all times.

I remain,

Yours faithfully,

*Sd.* SHIVARAM D. UBHAYAKER.

Enclosure to my letter No. P/P.W.D./1/54 of 2nd February 1954.

PRICE LIST OF SPARE PARTS FOR DODGE TRUCKS—TYPE T—234.

| | | Rs. | a. | p. |
|---|---|---|---|---|
| | **Accessory Units.** | | | |
| 1 | Self-starter Unit Complete—Each ... ... ... | 180 | 0 | 0 |
| 2 | Dynamo assembly complete ,, ... ... ... | 150 | 0 | 0 |
| 3 | Voltage regulator and Reverse Current Relay Heavy Duty assembly—each ... | 130 | 0 | 0 |
| 4 | 'Ball and Ball Carburettor assembly—each ... ... ... | 150 | 0 | 0 |
| 5 | Fuel Pump assy. complete—Each—Heavy Duty ... ... | 55 | 0 | 0 |
| 6 | Ignition Distributor assy. complete—each ... ... ... | 90 | 0 | 0 |
| 7 | Head Lights with Sealed Beam units—per pair ... ... | 48 | 0 | 0 |
| 8 | Radiator assy. complete—each ... ... ... | 509 | 0 | 0 |
| | **Engine and Components.** | | | |
| 1 | Engine Unit complete but without accessories but inclusive of clutch Unit-each | 2839 | 0 | 0 |
| 2 | One set of six pistons with pins and rings in over sizes—set... ... | 345 | 0 | 0 |
| 3 | One set of connecting rod and Main Bearing liners only in under sizes—set ... | 135 | 0 | 0 |
| 4 | One set of Gaskets for Engine—Cylinder Head, Manifold, Oil Pan etc.,—set. | 48 | 0 | 0 |
| 5 | One Water Pump Kit ... ... ... ... | 61 | 0 | 0 |
| | **Gearbox and Components.** | | | |
| 1 | One Gearbox unit complete less rear universal joint—each ... ... | 982 | 0 | 0 |
| 2 | One Clutch assy. complete ... ... ... ... | 181 | 0 | 0 |
| 3 | One set clutch facings and plate ... ... ... | 72 | 0 | 0 |
| | **Rear Axle and Components.** | | | |
| 1 | One complete rear axle unit less universal joints and wheel drums ... | 1532 | 0 | 0 |
| 2 | One spare Crown gear and pinion unit complete ... ... | 408 | 0 | 0 |
| 3 | One rear axle drive shaft ... ... ... ... | 180 | 6 | 0 |
| 4 | One set of one inner and one outer rear wheel Hub Bearings... ... | 86 | 0 | 0 |
| 5 | One propeller shaft complete in two pieces with three numbers universal joints and pillow block centre bearings complete. | 360 | 0 | 0 |
| 6 | One Pillow Block with Bearing for Prop. shaft ... ... | 85 | 0 | 0 |
| | **Springs.** | | | |
| 1 | One set rear springs—one pair ... ... ... | 550 | 0 | 0 |
| 2 | One set front springs—one pair ... ... ... | 280 | 0 | 0 |
| | **Brakes and Components.** | | | |
| 1 | One set of front and rear wheel cylinder units with cups ... ... | 124 | 6 | 0 |
| 2 | One set of front and rear wheel cylinder cups only ... ... | 16 | 0 | 0 |
| 3 | One set of front and rear wheel cylinder Boots only ... ... | 20 | 0 | 0 |
| 4 | One Vacuum Servo Brake Unit only ... ... ... | 202 | 0 | 0 |
| 5 | One set of Brake shoes for all four wheels complete with linings ... | 304 | 0 | 0 |
| 6 | One set of Brake Linings for four all wheels... . . ... | 148 | 0 | 0 |
| 7 | Master cylinder Unit complete ... ... ... | 75 | 0 | 0 |
| 8 | ,, ,, repair kit only. .... ... ... | 15 | 4 | 0 |
| | **Miscellaneous.** | | | |
| 1 | Spare Rim only (without Tyre or Tube) ... ... ... | 78 | 0 | 0 |

*E. & O. E.*

A comprehensive list is under preparation and will follow soon. I hope that the above items will give you a good idea as regards the favourable level of the prices of the spare parts for the Dodge Trucks Type T-234.

All prices quoted above are for delivery in Bangalore ex-godowns. Sales Tax and other Tax if any will be extra. All parts are offered subject to prior sale.

*Sd.* SHIVARAM D. UBHAYAKAR,

**CHAPTER XV (*a*)—ANNEXURE XXVII.**

M. MUNIAPPA, B.E., A.M.I.E., (Ind.),
SPECIAL ENGINEER,
VIDHANA SOUDHA DIVISION.

D.O.No. 1348/V.S.

*Bangalore, dated 13th February 1954.*

Dear Sir,

*Reg* :— Heavy Duty Dodge Trucks (5-7 tons) required urgently for collection of Materials for Vidhana Soudha Division (Twelve Nos.)

I write to invite your kind reference to your letter No. 9970-73 dated 29th January 1954 addressed to Government for sanction, I write to bring to your kind notice that the sanction for the above purchase is not yet received and works here are seriously handicapped for want of transport facility.

Hence, I request you kindly to address Government to sanction the same expeditiously to enable securing satisfactory progress.

Immediate compliance in the matter is requested.

With high regards.

Yours sincerely,

(Sd.) M. MUNIAPPA,
13/2

To
Sri K. S. Gangadhara, B.E.,
Chief Engineer of Mysore,
Bangalore.

*Immediate*

Remind P. W. Secretary and send copy of this letter.

(Intd.) K. S.
13/2
(Chief Engineer)

## CHAPTER XV (*a*)—ANNEXURE XXVIII.

Statement showing the details of Vidhana Soudha Lorries that were transferred to other Divisions and that are now working in this Division.

| Sl. No. | Lorry No. | Make of the Lorry. | Date of purchase to this Dn. and commencement of work. | Date of Transfer | Remarks |
|---|---|---|---|---|---|
| 1 | V.S. 1 ... | Desoto | 28—4—1953 | 26—9—1954 | Transferred to Sanitary Circle, Bangalore. |
| 2 | V.S. 2 ... | ,, | 28—4—1953 | ... | In Vidhana Soudha Division. |
| 3 | V.S. 3 ... | ,, | 5—5—1953 | 21—12—1954 | To Bangalore Division. |
| 4 | V.S. 4 ... | ,, | 28—4—1953 | 21—12—1954 | Do |
| 5 | V.S. 5 ... | ,, | 1—3—1954 | ... | |
| 6 | V.S. 6 ... | ,, | 9—2—1954 | ... | |
| 7 | V.S. 7 ... | ,, | 10—2—1954 | ... | |
| 8 | V.S. 8 ... | ,, | 10—2—1954 | ... | |
| 9 | V.S. 9 ... | ,, | 6—3—1954 | ... | |
| 10 | V.S. 10 ... | ,, | 11—3—1954 | ... | |
| 11 | V.S. 11 ... | ,, | 12—3—1954 | ... | Working in Vidhana Soudha Division. |
| 12 | V.S. 12 ... | ,, | 13—3—1954 | ... | |
| 13 | V.S. 13 ... | ,, | 17—3—1954 | ... | |
| 14 | V.S. 14 ... | ,, | 20—3—1954 | ... | |
| 15 | V.S. 15 ... | ,, | 1—4—1954 | ... | |
| 16 | V.S. 16 ... | ,, | 1—4—1954 | ... | |
| 17 | V.S. 17 ... | Dodge Truck | 25—3—1954 | 6—11—1954 | Transferred to Chitaldrug. |
| 18 | V.S. 18 ... | ,, | ,, | 6—11—1954 | Do |
| 19 | V.S. 19 ... | ,, | ,, | 27—8—1954 | To Water Supply Division. |
| 20 | V.S. 20 ... | ,, | ,, | ,, | Do |
| 21 | V.S. 21 ... | ,, | ,, | 29—8—1954 | To Chitaldrug Division. |
| 22 | V.S. 22 ... | ,, | ,, | ,, | Do |
| 23 | V.S. 23 ... | ,, | ,, | 12—8—1954 | To Davangere Division. |
| 24 | V.S. 24 ... | ,, | ,, | ,, | Do |
| 25 | V.S. 25 ... | ,, | ,, | 29—4—1954 | To Tumkur Division. |
| 26 | V.S. 26 ... | ,, | ,, | ,, | Do |
| 27 | V.S. 27 ... | ,, | ,, | 30—4—1954 | To Hassan Division. |
| 28 | V.S. 28 ... | ,, | ,, | ,, | Do |
| 29 | MY-5683-Z... | Chevrolet (SJOI) | 14—5—1953 | 21—12—1954 | To Bangalore Division. |

**CHAPTER XV (a)—ANNEXURE XXIX**

STORES PURCHASE COMMITTEE.

No. S.P.C. 59377-410. *Bangalore, dated 18th February 1954.*

To

The Firms dealing in Automobiles.

**Enquiry No. 12219.**

*Subject* :—Supply of Trucks required for the Vidhana Soudha Division, P.W.D.

(Reverse)

SCHEDULE.

Brand new military trucks of five or seven ton capacity six wheeler right hand drive powered by a six cylinder side valve petrol engine wheel base 152 and 168″ tyres to suit the vehicle complete with nicely finished factory built steel cabin with winding glasses and load carrying platform built solidly out of wood and steel with spare rim and set of tools.

*N.B.*—(1) The firms who have got ready stocks should quote, as the vehicles are to be delivered immediately on receipt of an order.

(2) In case the vehicle is required for inspection before the placing of an order, the vehicle should be driven to the office of the Special Engineer, V. S. Division, free of cost.

(3) Payment will be arranged by the consignee, only after the receipt and inspection of the vehicles and not through the bank.

(4) The intending tenderers must note that they must be in a position to supply spare parts required for the vehicles they offer, as and when required by the consignee.

(5) Other usual conditions.

## CHAPTER XV (a)—ANNEXURE XXX

Office of the Chief Engineer in Mysore,

*Bangalore, dated 4th/5th March 1954.*

To

The Secretary,
Stores Purchase Committee.

*Re.*—Supply of Trucks for Vidhana Soudha,

Dn.—Enquiry No. 12219.

SIR,

I return herewith the quotations received with your letter No. 62082 of 2nd March 1954. It is seen from the comparative statement prepared in this office, that the lowest offer is Construction Equipment Company, Ltd., Bombay, who have quoted Rs. 12,000. F.O.R. Bombay, for a military disposal truck. The wheel base is only 144" and the engine is reconditioned in the factory workshop at Bombay. Hence this is not recommended.

The next offer is from Sri Shivaram Devarao Ubhayakar who has quoted Rs. 13,825. F.O.R Bangalore, for a "Dodge" T-234 heavy duty truck. The wheel base is 168". The quotationist gives a guarantee for defects in workmanship and material for 90 days or 4,000 miles whichever is earlier. Further, he undertakes to give free service for a a period of six months. The spare parts are readily available. The delivery will be effected within one to two weeks from the date of placing the order. The truck has been tried by the Special Engineer, Vidhana Soudha Division, and found to be quite satisfactory.

Under the circumstances I request you kindly to place orders immediately with Sri Shivaram Devarao Ubhayakar for the supply of 12 heavy duty Dodge lorries, as the same are urgently required for Vidhana Soudha works.

Yours faithfully,

(*Sd.*) K. S. GANGADHARA, 4/3.
*Chief Engineer of Mysore.*

## CHAPTER XV (a)—ANNEXURE XXXI

Extract from Enquiry No. 12219—regarding supply of Trucks for Vidhana Soudha Division.
(From the Stores Purchase Committee File—Note Sheet)

He (the Special Engineer) has selected the vehicles offered by Sri S. D. Ubhayakar, Bangalore and has stated that these vehicles are suitable for his requirements. He states that the wheel base is 168", spare parts are readily available, delivery will be effected within 1-2 weeks from the date of placing the order, and that the firm gives a guarantee for defects in workmanship and material for 90 days or 4,000 miles whichever is earlier. He has also stated that one of the trucks produced by Sri S. D. Ubhayakar has been tried by the Special Engineer, Vidhana Soudha Division, and found to be quite satisfactory. The price quoted by Sri S. D. Ubhayakar for each vehicle is Rs. 13,825 F.O.R. Bangalore, sales tax being extra. The vehicles offered are reported to be complete with nicely finished factory built steel cabins with winding glasses and load carrying platform built solidly out of wood and steel and are according to the specifications prescribed. Sri S. D. Ubhayakar has also undertaken to give free service for a period of six months and to deliver the vehicles within 1-2 weeks from the date of placing the order.

No doubt the vehicles offered by Sri S. D. Ubhayakar are suitable for the purpose and the price also is very favourable. As I have pointed out in another S.P.C. file bearing Enquiry No. 12060, the vehicles offered by him are vehicles bought by him from military disposals some time ago. It is not known when Sri S. D. Ubhayakar bought these vehicles from surplus military disposals and why the Defence Department of the Government of India sold these vehicles to civilians. It cannot also be understood whether these vehicles were disposed of by the Defence Department on account of superfluity or on account of being out-of-date. No information is available on this subject. It is also not known whether these vehicles bought by the Defence Department some years ago and kept idle for a considerable period are in good condition capable of giving satisfactory and sound service expected of the vehicles. The year of manufacture of these vehicles also is not known. Sri S. D. Ubhayakar himself does not know definitely the year of manufacture of these vehicles. He merely says that they are as good as new ones and capable of giving as satisfactory a performance as those of new vehicles and that he is in a position to supply ample spare parts required for these vehicles in future. The President, Stores Purchase Committee, also has, in paras 39-40 in the same file bearing Enquiry No. 12060 and in another file bearing Enquiry No. 11995 recorded his minutes in para 73 and discussed the merits and demerits of these vehicles.

As the rates offered by Sri S. D. Ubhayakar for these vehicles fitted up with steel cabins and load carrying platforms are really favourable, we may avail of the same provided the department is satisfied that these vehicles are as good as new and capable of giving satisfactory service without any trouble for a normal period expected of such vehicles and that these vehicles though manufactured several years ago are suitable and in sound condition with all parts intact and they can serve for the normal period of life prescribed for new vehicles and there would be no difficulty whatsoever in obtaining spare parts. Before recommending to Government to approve the purchase of these vehicles, we may with advantage, suggest to Government to stipulate that 90 per cent of the value of the vehicles should be paid to Sri S. D. Ubhayakar after receipt of the vehicles and the balance of 10 per cent paid after a period of one year. A condition may also be stipulated that if the vehicles were to become unserviceable during this period or if proper service is not given for the period agreed upon or if spare parts are not made available promptly, the balance amount will be forfeited to Government either in whole or in part at the discretion of the President, S.P.C. Before recommending the purchase to Government, we may perhaps ask Sri S. D. Ubhayakar, as we did last time, to intimate if he is agreeable to the same conditions as were agreed to by him on a previous occasion. While placing orders we may also stipulate that the vehicles must be produced before the Chief Engineer or the Special Engineer, Vidhana Soudha Division, for inspection and test and that the vehicles will be accepted only after the vehicles are passed as satisfactory and serviceable. We may also indicate to the department that only such number of vehicles as are found fit may be accepted and the rest rejected. The Chief Engineer may also be asked to send a report as to the soundness and serviceability of these vehicles after he takes possession of these vehicles.

President, S.P.C. } Intd.I.P. 8/3 (Secy, S.P.C.)

The note has been put up by the Secretary under my instructions and I agree with the same. The recommendation of the Chief Engineer in regard to the purchase of 12 trucks of Dodge Make from Sri Ubhayakar may be accepted in the circumstances explained, subject to the following conditions :—

(1) The Special Engineer, Vidhana Soudha Division should satisfy himself that each of the vehicles is intact and in good condition, capable of giving service for a normal period of life of such vehicles.
(2) The order will be effective only to the extent the vehicles are accepted after test by the Special Engineer, whose decision in this respect will be binding and final.
(3) Delivery should be not later than 15 days after the date of receipt of order.
(4) Only 90 per cent of value will be paid on the vehicles so accepted, the remaining 10 per cent being held as security deposit for one year, for the proper performance of the conditions of contract, including those relating to free service for the period agreed upon and prompt supply of spare parts. This deposit will be liable to be forfeited in whole or in part at the discretion of the President, S.P.C., in case the above conditions are violated to any extent.

Sri Ubhayakar should agree to the conditions within three days after the date of receipt of the order. If he fails to do so, the order is liable to be cancelled. The same result will follow, if he does not adhere strictly to the delivery terms.

Please submit to the Minister concerned for orders.

Intd. 9-3-1954
(President, S.P.C.)

## CHAPTER XV (*a*)—ANNEXURE XXXII.

Office of the Secretary,
Stores Purchase Committee,

No. S.P.C. 63523. *Bangalore, dated 11th March '54.*

To.

Messrs. Shivaram Devarao Ubhayaker,
High Grounds, BANGALORE.

DEAR SIR,

Enquiry No. 12219—Supply of Dodge Trucks to Vidhana Soudha Division, P. W. Department.

Ref: Your Quotation dated 26th February 1954.

With reference to the subject mentioned above, I write to request you kindly to intimate, if you are agreeable to the conditions noted hereunder:—

1. 90 % of the value of the vehicles will be paid to you after you deliver the vehicles to the Special Engineer, Vidhana Soudha Division.
2. The balance of 10% will be paid to you only after the expiry of one year from the date of receipt of vehicles by the Department.
3. If the vehicles were to become unserviceable during this period of one year and if proper service facilities are not given to the vehicles for the period agreed upon by you and spare parts are not made available promptly and without any difficulty, the balance of 10% will be forfeited to Government either in whole or in part at the discretion of the President, Stores Purchase Committee.
4. You must stand guarantee that the vehicles though manufactured several years ago (6 or 7 years, if not more) they are in sound condition, that all parts are intact, that they can serve for the normal period of life prescribed for new vehicles and there would be no difficulty whatsoever in obtaining spare parts required by these vehicles.
5. The order will be effective only to the extent the Vehicles are accepted after test by the Special Engineer, Vidhana Soudha Division, whose decision in this respect will be binding and final.
6. You must make arrangements to produce the vehicles before the Chief Engineer *on or before 15th March 1954*, for inspection and test.

If you are agreeable to these conditions, the question of placing orders for 12 Dodge Trucks of the Specifications will be considered by the Stores Purchase Committee.

Please acknowledge receipt of this letter and expedite your reply immediately.

Yours faithfully,

(Sd.) I. P. MALLAPPA,
Secretary.

MEMO No. 63524-25, dated 11-3-54.

Copy to:

1. The Chief Engineer of Mysore, Bangalore. The Special Engineer, Vidhana Soudha Division should satisfy himself that each of the Vehicles is intact and in good condition, capable of giving service for the normal period of life of such vehicles. A report after the inspection of the vehicles may be sent to this office, immediately.
2. The Special Engineer, Vidhana Soudha Division, Bangalore for taking needful action.

**CHAPTER XV (*a*)—ANNEXURE XXXIII.**

Office of the Secretary,
Stores Purchase Committee,

No. S.P.C. *Bangalore, dated 11th March 54.*

To

Messrs. Shivaram Devarao Ubhayakar,
Bangalore, India.

GENTLEMEN,

LOCAL INDENT No. 14289.

Your Quotation No. L.P./S.P.C./11/54, dated 26th February 1954 and letter dated 12th March 1954 received in response to our Enquiry No. 12219.

*Subject*: Supply of Trucks for the Vidhana Soudha, Division, Bangalore.

1. Please be good enough to enter order for the materials described in the attached schedule at the prices specified therein and arrange to supply them within the time stipulated in the schedule.

2. Instructions regarding the name and address of the officers to whom the consignment, the railway receipt and bills of cost should be sent are also given in the schedule.

3. The materials should be carefully and securely packed, so as to avoid damages during transit. Such of the materials or parts thereof as might be received in a damaged or unserviceable condition will be required to be replaced free of all cost to us. The materials should be fully insured against the losses, and damage, if necessary.

*4. Failure to make the supply in time or according to the specification or approved sample will entail cancellation of the order and purchase being made from other sources debiting the extra cost, if any, to you. In such an event, the Stores Purchase Committee reserve also the right to levy a sum equal to 3 per cent of the value of the order as liquidated damages.

5. The above Local Indent Number should be quoted in all correspondence relating to this subject.

6. Please acknowledge receipt of this communication.

Yours faithfully,
(Sd.) I. P. MALLAPPA,
Secretary,
Stores Purchase Committee.

No. 63631-33 dated 11th March 1954.

Copy forwarded to—

1. The Chief Engineer in Mysore, Bangalore.
2. The Special Engineer, Vidhana Soudha Division, Bangalore.
3. The Accountant-General, Mysore, Bangalore.
4. Messrs. Dozeys Garage, Bangalore.

*Vide Slip attached.

**Local Indent No. 14289.**

Schedule of order placed with Messrs. Shivaram Devarao Ubhayakar, Bangalore, India.

| | | | |
|---|---|---|---|
| 1 | Name and address of consignee | ... | The Chief Engineer, Bangalore. |
| 2 | Name and address of officer to whom railway receipt should be sent. | ... | Do |
| 3 | Name and address of officer to whom bills of cost should be sent in duplicate. | ... | Do |
| 4 | Terms of delivery. | | ... |

| Item No. | Description of materials | Quantity to be supplied | Rate accepted |
|---|---|---|---|
| 1 | 'Dodge' T-234 Five-Ton Truck Heavy Duty Type, six-wheeler, Right Hand drive, powered by six cylinder side valve petrol engine, WB 168", Tyre size 10·00×20" with dual rear wheels complete with beautifully finished Factory-built all steel cabin with winding glasses and Factory-build load carrying platform built solidly out of wood and steel, with all the tools, etc. The vehicle will be supplied with one spare rim only without tyre or tube and a standard set of tools comprising of—one jack and handle, one wheel wrench, one pump, two tyre levers, one starting handle and one tool bag. | 12 Trucks. | Delivery at Bangalore S.T. if applicable extra. Rs. 13,825 per Vehicle. |

*N. B* : (1) This order will be effective only to the extent of the vehicles that are accepted after test by the Special Engineer, Vidhana Soudha Division, whose decision will be binding and final.

(2) You must make arrangements to produce the vehicles before the Chief Engineer on or before 15th March 1954, for inspection and test.

(3) You must stand guarantee that the vehicles are in sound condition, that all parts are intact, that they can serve for the normal period of life prescribed for new vehicles and there would be no difficulty whatsoever in obtaining spare parts required for the vehicles.

(4) You must arrange to supply spare parts as and when required by the Department.

(5) *Payment.*—90 per cent of the value of the vehicles will be paid to you after you deliver the vehicles in good condition. The balance of 10 per cent will be paid after a period of one year. If proper service is not given for the period agreed upon, and if spare parts are not made available promptly, the balance amount will be forfeited to Government either in whole or in part at the discretion of the President, Stores Purchase Committee.

(6) *Service* and maintenance facilities should be given to the vehicles, free of charges for a period of six months from the date of vehicles put on road through Messrs. Dozey's Garage, Bangalore.

(Sd.) I. P. MALLAPPA,
*Secretary.*

**CHAPTER XV (a)—ANNEXURE XXXIV**

Office of the Special Engineer,
Vidhana Soudha Division,

No. 18-4-V.S. *Bangalore dated 5th April 1954.*

To
The Chief Engineer of Mysore,
BANGALORE.

Re.—Local Indent No. 14289.

SUB.—Supply of Trucks for the Vidhana Soudha Division, Bangalore.

SIR,

With reference to letter No. L.P/S.P.C/11/54 dated 26th February 1954, from the Secretary, Stores Purchase Committee on the above subject, I write to state that Messrs. Shivaram Devarao Ubhayakar, Bangalore, have completed on 31st March 1954, their delivery of Twelve Heavy Duty Dodge Trucks required for this Division. An Inventory of 12 Trucks is enclosed for information.

All the 12 Trucks are of Ex-Military Surplus stocks. They do not appear to have been used except for their journey from Hyderabad to Bangalore and other short journeys for trial purposes. Each has made approximately 1,000 Kilometres which comes to about 600 miles. *Few tyres of some of the lorries are slightly damaged here and there on the edges and Messrs. Ubhayakar, have assured that they would stand guarantee : for the normal life of 10,000 miles of these tyres under normal working conditions and in the event of any break down they would replace them. The tyres of one lorry bearing Engine No. T. 234-5153 are ground grip make and the suppliers state that they will replace these by ordinary tread tyres at their cost. Two other tyres are badly damaged in corners and Messrs. Ubhayakar, have agreed to supply two new ones in addition without extra cost.

†As regards minor adjustments referred to in the enclosed inventory, the suppliers desired that these Trucks may be sent to Messrs. Dozey's Garage, Mahatma Gandhi Road for alteration and for servicing at the suppliers cost. I am taking action accordingly.

Copy of Stores Purchase Committee's order is enclosed for kind information. The vehicles are kept ready for inspection of Chief Engineer, *vide* clause No. B. 2, of Stores Purchase Committee indent and for orders to pass the bill presented by the firm.

Yours faithfully,

(Sd.) M. MUNIAPPA, 3/4
*Special Engineer,*
*Vidhana Soudha Division.*

I have seen the vehicles. Sufficient amount for replacing damaged parts should be withheld and the bills passed for payment.

Intd. K. S. 14/4/54,
(*Chief Engineer*).

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**The C.E. has to inspect the vehicles before the bill is passed as per S.P.C. indent. Intd.* 10/4.

†*Submitted to C.E. for perusal in last para of this letter. Portion marked 'A' on the reference flagged may be perused. Intd.* 13/4.

## HEAVY DUTY LORRIES.

### Inventory—I.

1. Chassis No. 83005787.
2. Engine No. T. 234—7535.
   Engine Parts intact.

Vacuum brakes, Shock absorbers for front springs only. Helper Springs to rear springs. Front Right Rim damaged to be replaced. Radiator in good condition. Side mirror not fixed, Hand Horn in good condition. Milometer Reading 1089·7 Kilometers. Battery terminals damaged and to be replaced. Clamps to fix the battery have to be provided. Gear and Brake in good condition. Petrol Tank nut and washer to be replaced. Good Year Tyres 6 with 38 × 9 extra duty, heavy duty 14 Ply.

1. Rear left outer Tyre.
2. Rear Right inner and outer Tyres
3. Front left Tyre.
4. Front Right Tyre.

} Minor cuts on edges.

All lights in good condition. Rubber lining for the left door to be fixed in position. Inner ceiling of cabin not provided.

### Inventory No. II.

Chassis No. 83000477.

Engine No. T. 234 – 1504.

Exide Battery No. 1239. Terminals good. Clamp not fixed. Milometer 1014 Kilometers. Doors and glass good. Rear left outer Tyre cut (During Trial run). The Suppliers have promised to replace this. Rims good. Good Year Tyre 10·00×20—38×9, Radiator good. Engine parts intact. Petrol tank good. Tool Box good. Hand Horn good.

### Inventory No. III.

Chassis No. 83006775.

Engine No. T. 234—1784.

Engine part intact. Vacuum brakes-shock absorbers for front springs. Helper springs for rear springs. Rims in good condition. Radiator in good condition. Side mirror not provided. Hand Horn in good condition. Milometer reading 1215·0 Kilometers. Exide Battery No. 3103. Terminals good. Clamp to be provided. Gear and brake in good condition. Petrol Tank good with cap. U. S. Royal Tyres 10·00 × 20, 12 Ply. Rear left outer tyre two buttons chipped off. All lights good. Glass and doors good. Tool box good. Cabin inner ceiling not provided.

### Inventory No. IV.

Chassis No. 83005975.

Engine No. T. 234—6621.

Engine Parts intact. Vacuum brakes, Shock absorbers for front springs only. Helper Springs or rear springs. Rims in good condition. Radiator in good condition. Side mirror not provided. Hand Horn good, but no pressing button which has to be provided. Milometer reading 1189·5 Kilometers. Battery terminals good but no clamps. Gear and brakes in good condition. Petrol Tank good. Good Year Tyres 10·00×20—38×9, 14 Ply. Minor cuts on edges on the Rear left outer and inner tyres also right ones. All lights in good condition. Front left tyre damaged. Left door glass broken. Wipers good. Tool box good. Inner ceiling of the cabin not provided.

### Inventory No. V.

Chassis No. 83004732.

Engine No. T. 234—6167.

Engine parts intact. Vacuum brakes: Shock absorbers for front spring only. Helper Springs to rear Springs. One bolt damaged, and nut missing for the left front wheel and ring

damaged to be replaced. Radiator in good condition. Side mirror not provided. Hand Horn in good condition. Milometer reading 1195·4 Kilometers. Battery terminals good but clamps to be provided. Gear and brake in good condition. Petrol Tank in good condition. Good Year Tyre 10·00×20, 14 Ply. 38×9. Minor cuts on the left rear outer tyre. All lights in good condition. Left door glass broken and glass lifter button damaged, to be replaced. Wipers good. Inner ceiling of the cabin not provided.

**Inventory No. VI.**

Chassis No. 83004071
Engine No. T. 234-5153.

Engine Parts intact. Vacuum brakes, Shock absorbers for front springs. Helper springs to rear springs. Rims in good condition, except the rear left outer one slightly damaged. Radiator in good condition. Side mirror not provided. Hand Horn good. Milometer reading 1130·6 Kilometers. Battery terminals good but clamps to be provided. Gear and brake in good condition. Petrol Tank good with ordinary cap. Fire Stone ground grip Tyre 10·00 × 20 Heavy duty 12 Ply. All the six are ground grip tyres of which one in each in the side to be replaced by the Suppliers. All lights in good condition. Doors and glasses good. Wipers good. Tool box good. Inner ceiling of the cabin not provided.

**Inventory No. VII.**

Chassis No. 83005759
Engine No. T. 234-7018.

Engine parts intact. Vacuum brakes, shock absorbers for front springs and helper springs for rear springs. Rims in good condition. Radiator in good condition. Side mirror not fixed. Hand Horn in good condition. Milometer reading 1152·1 Kilometers. Battery terminals damaged and no clamps. Gear and brake in good condition. Petrol tank nut and washer to be replaced. Rear right corner of the tank damaged, and has to be repaired. Tyres 10·00 × 20 sieberling special Heavy Duty 12 Ply. All lights it good condition. Left front mudguard damaged. Dash board box broken. Left door glass broken, to be replaced. Wipers good. Tool box good. Inner ceiling of cabin not provided.

**Inventory No. VIII.**

Chassis No. 83006156
Engine No. T. 234-7849.

Engine parts intact—Vacuum brakes, Shock absorbers for front springs. Helper Springs for Rear Springs. Rims in good condition. Radiator in good condition. Milometer reading 1157·0 Kilometers. Side mirror not provided. Hand Horn in good condition. Battery terminals not good. Clamps not fixed. Exide battery No. 3134. Gear and Brakes are in good condition. Petrol Tank in good condition, cap good. Good Year Tyres 10·00 × 20 Heavy duty. 14 Ply Rear Right outer tyre No. 868660 damaged to be replaced. All lights good, Doors good, left door glass broken to be replaced. Tool box good. Ceiling of the inside of cabin not provided.

**Inventory No. IX.**

Chassis No. 83002103
Engine No. T. 234-2087.

Engine parts intact. Right door glass broken to be replaced. Milometer 894 Kilometers. Battery No. 2972. Terminals good. Rims good. Petrol Tank good. Gear and brake good. Good Year Tyres 38 × 9. Radiator good. Slight cuts on Front left tyre.

**Inventory No. X.**

Chassis No. 83002141
Engine No. T. 234-3175.

Engine parts intact. Vacuum brakes, Shock absorbers for front springs. Helper springs to rear springs. Rims in good condition. Radiator in good condition. Side mirror not provided. Hand Horn in good condition. Milometer reading 1114·0 Kilometers. Exide Battery No. 3100. Terminals good. Clamps to be provided. Gear and brake in good condition. Petrol tank good, cap alright. Good Year Tyres 10·00 × 20 – 38 × 9 14 Ply. Slight cut on left rear inner and outer tyres. All lights good. Door and glasses good. Tool box good. Cabin inner ceiling not provided.

**Inventory No. XI.**

Chassis No. 83001315

Engine No. T. 234-2329.

Engine parts intact. Vacuum brakes. Shock absorbers for front springs and helper springs for rear springs. Rims in good condition. Radiator in good condition. Side mirror not provided. Hand Horn in good condition. Milometer reading 1060·0 Kilometers. Battery Terminals good. Exide Battery No. 3105. Clamps provided. Gear and Brake in good condition. Petrol Tank good. (Tyres 10·00 × 20 – 9. 75 × 20 12 Ply. Goodrich Silver town). Slight cut on Right rear inner tyre and front right tyre. All lights in good condition. Doors and glass in good condition. Tool box good. Ceiling on the inside of the cabin not provided.

**Inventory No. XII.**

Chassis No. 83002194

Engine No. T. 234-3214.

Engine parts intact. Vacuum brakes, Shock absorbers for front springs. Helper springs for rear springs. Rims in good condition. Side mirror has to be provided. Hand Horn good. Milometer reading 1154·0 Kilometers. Exide Battery No. 3106. Terminals good. Clamp to be provided. Gear and brake in good condition. Petrol Tank good, Cap ordinary. Rear Left Outer Tyre, one button slightly damaged. Good Year Tyres 10·00 × 20 – 38 × 9 – 14 Ply. All lights good. Doors good. Left glass broken. Engine oil to gauge. Tool box good. Inner ceiling of cabin not provided.

(Sd.) M. MUNIAPPA,
*Special Engineer,*
*Vidhana Soudha Division.*

## CHAPTER XV (a)—ANNEXURE XXXV.

Statement showing the details of mileage covered by Desoto lorries of Vidhana Soudha Division during the month of February 1954.

| Month and date | V.S. 1 | | V.S. 2 | | V.S. 3 | | V.S. 4 | | V.S. 5 | | V.S. 6 | | V.S. 7 | | V.S. 8 | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | C | D | C | D | C | D | C | D | C | D | C | D | C | D | C | D |
| 1-2-1954 ... | 114 | ... | 112 | ... | 118 | ... | 40 | ... | ... | 17 | ... | ... | ... | ... | ... | ... |
| 2-2-1954 ... | 114 | ... | 112 | ... | 118 | ... | 45 | ... | ... | 28 | ... | ... | ... | ... | ... | ... |
| 3-2-1954 ... | Garage | 9 | ... | 5 | 119 | ... | ... | 37 | ... | 25 | ... | ... | ... | ... | ... | ... |
| 4-2-1954 ... | 43 | 24 | 77 | ... | 118 | ... | 121 | ... | ... | 35 | ... | ... | ... | ... | ... | ... |
| 5-2-1954 ... | 124 | ... | Repairs | | 118 | ... | 121 | ... | ... | 27 | ... | ... | ... | ... | ... | ... |
| 6-2-1954 ... | ... | 16 | ... | 40 | 119 | ... | 121 | ... | ... | 74 | ... | ... | ... | ... | ... | ... |
| 7-2-1954 ... | ... | 2 | ... | 4 | Maintenance day. | | | | | | | | | | | |
| 8-2-1954 ... | ... | 90 | ... | ... | 39 | ... | 121 | ... | ... | 30 | ... | ... | ... | ... | ... | ... |
| 9-2-1954 ... | ... | 4 | 110 | ... | ... | 12 | 120 | ... | ... | 32 | ... | ... | ... | ... | ... | ... |
| 10-2-1954 ... | 116 | ... | 110 | ... | ... | 20 | 119 | ... | ... | 52 | ... | 24 | ... | 24 | ... | 18 |
| 11 2 1954 ... | 116 | ... | 110 | ... | Repairs | | 116 | ... | ... | 29 | ... | 8 | ... | 9 | ... | 9 |
| 12-2-1954 ... | 117 | ... | 110 | ... | Do | | 120 | ... | ... | 42 | ... | 4 | ... | 9 | ... | 4 |
| 13-2-1954 ... | 117 | ... | 110 | ... | Do | | ... | ... | ... | 90 | ... | 9 | ... | 15 | ... | 18 |
| 14-2-1954 ... | | | | | Maintenance day. | | | | | | | | | | | |
| 15-2-1954 ... | 117 | ... | 111 | ... | Repairs | | 125 | ... | ... | 22 | ... | 11 | ... | 8 | ... | 13 |
| 16-2 1954 ... | 117 | ... | 110 | ... | 123 | ... | 121 | ... | ... | 22 | ... | 9 | ... | 4 | ... | 7 |
| 17-2-1954 ... | 116 | ... | 110 | ... | 6 | ... | 124 | ... | ... | 57 | ... | 13 | ... | 11 | ... | 8 |
| 18-2-1954 ... | 117 | ... | 110 | ... | 129 | ... | 122 | ... | ... | 43 | ... | 46 | ... | 45 | 40 | ... |
| 19-2-1954 ... | 117 | ... | 109 | ... | 30 | ... | 124 | ... | ... | 43 | ... | 57 | ... | 26 | Repairs | |
| 20-2-1954 ... | 117 | ... | 112 | ... | 40 | 5 | 120 | ... | ... | 25 | ... | 93 | ... | 20 | 35 | ... |
| 21-2-1954 ... | | | | | Maintenance day. | | | | | | | 6 | ... | 6 | ... | 6 |
| 22-2-1954 ... | 117 | ... | 110 | ... | 98 | ... | 121 | ... | ... | 40 | ... | 18 | ... | 92 | ... | 10 |
| 23-2-1954 ... | 117 | ... | 110 | ... | 99 | ... | 121 | ... | ... | 18 | ... | 95 | ... | 14 | ... | 5 |
| 24-2-1954 ... | 116 | ... | 109 | ... | ... | 62 | 121 | ... | ... | 40 | ... | 59 | ... | 22 | ... | 15 |
| 25-2-1954 ... | 116 | ... | 109 | ... | ... | 26 | 121 | ... | ... | 30 | ... | 40 | ... | 39 | ... | 26 |
| 26-2-1954 ... | 116 | ... | 112 | ... | ... | 32 | ... | 9 | ... | 46 | ... | 37 | ... | 31 | ... | 30 |
| 27-2 1954 ... | 116 | ... | 110 | ... | 111 | ... | 84 | ... | ... | 46 | ... | 95 | ... | 95 | ... | 30 |
| 28-2-1954 ... | | | | | Maintenance day. | | | | ... | ... | ... | 14 | ... | ... | ... | 10 |
| Total ... | 2,264 | 145 | 2,283 | 49 | 1,445 | 157 | 2,468 | 46 | ... | 913 | ... | 638 | ... | 470 | 75 | 209 |

Statement of mileage of Vehicles of Vidhana Soudha Division.

| Months | M.Y. 5683-Z. | | V. S. 1 | | V. S. 2 | | V. S. 3 | | V. S. 4 | |
|---|---|---|---|---|---|---|---|---|---|---|
| 1 | 2 | | 3 | | 4 | | 5 | | 6 | |
| | C. | D. | C. | D. | C. | D. | C. | D. | C. | D. |
| 1 September 1953 ... | ... | 371 | 750 | 1,162 | .. | 1,481 | 1,294 | 786 | 2,406 | 238 |
| 2 October 1953 ... | ... | 488 | 205 | 1,302 | 237 | 1,173 | 628 | 937 | 1,342 | 660 |
| 3 November 1953 ... | ... | 1,535 | 3,403 | 146 | 1,105 | 1,092 | 2,303 | 172 | 2,423 | 43 |
| 4 December 1953 ... | ... | 819 | 3,063 | 76 | 2,108 | 88 | 2,132 | 1,855 | 2,407 | 472 |
| 5 January 1954 ... | ... | 483 | 2,325 | 28 | 2,265 | 76 | 2,355 | 41 | 3,181 | 15 |
| 6 February 1954 ... | ... | 913 | 2,264 | 145 | 2,283 | 249 | 1,445 | 159 | 2,468 | 46 |
| 7 March 1954 ... | ... | 898 | 897 | 149 | 2,014 | 49 | 2,713 | 7 | 1,510 | 24 |
| 8 April 1954 ... | ... | 700 | 947 | 115 | 1,435 | 36 | 499 | 1,388 | 1,428 | 124 |
| 9 May 1954 ... | ... | 830 | 779 | 946 | 2,003 | 39 | 146 | 749 | 327 | 127 |
| 10 June 1954 ... | ... | 718 | 902 | 1,298 | 81 | 108 | 348 | 928 | 552 | 1,827 |

| Months | V. S. 5 | | V. S. 6 | | V. S. 7 | | V. S. 8 | | V. S. 9 | | V.S. 10 | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | 7 | | 8 | | 9 | | 10 | | 11 | | 12 | |
| | C. | D. | C. | D. | C. | D. | C. | D. | C. | D. | C. | D. |
| 1 September 1953 ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... |
| 2 October 1953 ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... |
| 3 November 1953 ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... |
| 4 December 1953 ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... |
| 5 January 1954 ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... |
| 6 February 1954 ... | ... | ... | ... | 638 | ... | 470 | 75 | 209 | ... | ... | ... | ... |
| 7 March 1954 ... | 1,561 | 690 | 235 | 1,413 | 124 | 918 | ... | 437 | 1,513 | 583 | ... | 1,091 |
| 8 April 1954 ... | 719 | 1,376 | 1,825 | 867 | 670 | 1,442 | ... | 1,352 | 4,790 | ... | ... | 2,471 |
| 9 May 1954 ... | 441 | 1,440 | 1,994 | 17 | 399 | 1,059 | 440 | 1,680 | 2,568 | 120 | 80 | 2,746 |
| 10 June 1954 ... | 2,841 | 144 | 1,875 | 27 | 235 | 1,156 | 861 | 1,176 | 2,666 | ... | ... | 3,244 |

| Months | V. S. 11 | | V. S. 12 | | V. S. 13 | | V. S. 14 | | V. S. 15 | | V.S. 16 | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | 13 | | 14 | | 15 | | 16 | | 17 | | 18 | |
| | C. | D. | C. | D. | C. | D. | C. | D. | C. | D. | C. | D. |
| 1 September 1953 ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... |
| 2 October 1953 ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... |
| 3 November 1953 ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... |
| 4 December 1953 ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... |
| 5 January 1954 ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... |
| 6 February 1954 ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... |
| 7 March 1954 ... | ... | 948 | ... | 534 | ... | 535 | ... | 190 | ... | ... | ... | ... |
| 8 April 1954 ... | 272 | 1,644 | 1,376 | 391 | 1,410 | 695 | 271 | 2,161 | 764 | 1,177 | ... | ... |
| 9 May 1954 ... | 135 | 2,041 | 671 | 245 | 1,455 | 693 | ... | 3,009 | 2,861 | 5 | 571 | 1,498 |
| 10 June 1954 ... | 1,588 | 1,046 | ... | ... | 694 | 15 | 390 | 2,477 | 2,331 | 18 | 563 | 72 |

NOTE :—C=Contractor. D=Department.

Statement showing the details of mileage covered by Desoto lorries of Vidhana Soudha Division during the month of March 1954.

| Month and Date | V.S. 1 | | V.S. 2 | | V.S. 3 | | V.S. 4 | | V.S. 5 | | V.S. 6 | | V.S. 7 | | V.S. 8 | | V.S. 9 | | V.S. 10 | | V.S. 11 | | V.S. 12 | | V.S. 13 | | V.S. 14 | | M.Y. 5683 Z. | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | C. | D. | C. | D. | C. | D. | C. | D. | C. | D. | C. | D. | C. | D. | C. | D. | C. | D. | C. | D. | C. | D. | C. | D. | C. | D. | C. | D. | C. | D. |
| 1-3-1954 ... | ... | 8 | 110 | ... | 125 | ... | 130 | .... | ... | 48 | ... | 47 | 114 | ... | ... | 38 | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | 46 |
| 2-3-1954 ... | 54 | ... | 112 | ... | 125 | ... | 129 | ... | ... | 74 | ... | 73 | ... | 62 | ... | 70 | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | 32 |
| 3-3-1954 ... | ... | 9 | 111 | ... | 125 | ... | 129 | ... | ... | 94 | ... | 14 | ... | 18 | ... | 7 | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | 17 |
| 4-3-1954 ... | ... | 15 | ... | 13 | 125 | ... | Repairs | | ... | 12 | ... | 94 | ... | 93 | ... | 96 | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | .. | ... | 48 |
| 5-3-1954 ... | ... | 36 | 120 | ... | 125 | ... | ,, | | ... | 94 | ... | 94 | ... | 91 | ... | 96 | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | 30 |
| 6-3-1954 ... | ... | 15 | 120 | ... | 125 | ... | ... | 24 | ... | 55 | ... | 51 | 114 | ... | ... | 49 | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | 48 |
| 7-3-1954 ... | Repairs | | 120 | Maintenance | | | 160 | Maintenance | | | ... | 17 | Maintenance | | 13 | | ... | ... | Maintenance | | | | | | | | ... | ... | ... | 21 |
| 8-3-1954 ... | ,, | | 120 | ... | 125 | ... | 160 | ... | ... | 93 | ... | 66 | 91 | ... | ... | 68 | ... | 8 | | | | | | | | | ... | ... | ... | 30 |
| 9-3-1954 ... | ,, | | .. | 8 | 125 | ... | 161 | ... | 149 | ... | 122 | | 92 | ... | Repairs | | ... | 70 | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | 30 |
| 10-3-1954 ... | ,, | | 87 | ... | 125 | ... | 161 | ... | 150 | ... | ... | 92 | 91 | ... | ,, | | ... | 13 | | | ... | ... | ... | ... | ... | ... | ... | ... | ... | 30 |
| 11-3-1954 ... | ,, | | 87 | ... | 125 | ... | 160 | | 149 | ... | ... | 43 | ... | 61 | ,, | | ... | 109 | ... | 10 | ... | ... | ... | ... | ... | ... | ... | ... | ... | 36 |
| 12-3-1954 ... | ... | 16 | 87 | ... | 124 | ... | 160 | ... | 149 | ... | ... | 66 | ... | 66 | ,, | | ... | 106 | ... | 9 | ... | ... | ... | ... | ... | ... | ... | ... | ... | 21 |
| 13-3-1954 ... | 125 | ... | Repairs | | 124 | ... | 160 | ... | 149 | ... | ... | 94 | 114 | ... | ,, | | | 98 | ... | 8 | ... | ... | ... | ... | ... | ... | ... | ... | ... | 42 |
| 14-3-1954 ... | Maintenance day | | | | ... | ... | ... | ... | ... | ... | ... | 6 | ... | ... | Maintenance day | | | | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... |
| 15-3-1954 ... | 125 | Holiday | | | 124 | ... | Repairs | | 149 | ... | ... | 96 | 114 | ... | Repairs | | 136 | ... | ... | 10 | ... | 8 | ... | ... | ... | ... | ... | ... | ... | 24 |
| 16-3-1954 ... | 85 | ... | 94 | ... | 124 | ... | ,, | | 149 | ... | ... | 98 | ... | 94 | ,, | | ... | 65 | ... | 97 | ... | 18 | ... | 8 | ... | ... | ... | ... | ... | 36 |
| 17-3-1954 ... | 85 | ... | 94 | ... | 124 | ... | ,, | | ... | 7 | ... | 95 | ... | 95 | ,, | | ... | 20 | ... | 94 | ... | 13 | ... | 4 | ... | ... | ... | ... | ... | 30 |
| 18-3-1954 ... | | 22 | Repairs | | 124 | ... | ,, | | ... | 5 | ... | 94 | ... | 94 | ,, | | ... | 94 | ... | 95 | ... | 94 | ... | 12 | ... | ... | ... | ... | ... | 21 |
| 19-3-1954 ... | ... | 9 | ,, | | ... | 4 | ,, | | 104 | ... | 113 | ... | 93 | ... | ,, | | 110 | ... | ... | 94 | ... | 95 | ... | 88 | ... | ... | ... | ... | ... | 30 |
| 20-3-1954 ... | ... | 8 | ,, | | 98 | ... | ,, | | 104 | ... | ... | 15 | 93 | ... | ,, | | 96 | ... | ... | 13 | ... | 95 | ... | 12 | ... | 18 | ... | 8 | ... | 30 |
| 21-3-1954 ... | Maintenance | | 94 | ... | Maintenance | | | | ... | ... | ... | ... | ... | ... | ,, | | 111 | ... | ... | 10 | ... | 10 | Maintenance | | | | ... | ... | ... | ... |
| 22-3-1954 ... | 90 | ... | 94 | ... | 99 | ... | Repairs | | 103 | ... | ... | 9 | ... | 12 | ,, | | 102 | ... | ... | 19 | ... | 95 | ... | 12 | ... | 99 | ... | 8 | ... | 24 |
| 23-3-1954 ... | ... | 12 | 100 | ... | Repairs | | ,, | | 103 | ... | ... | 17 | 99 | ... | ,, | | 105 | ... | ... | 95 | ... | 95 | ... | 92 | ... | 10 | ... | 5 | ... | 34 |
| 24-3-1954 ... | ... | 7 | 100 | ... | ,, | | ,, | | 103 | ... | ... | 11 | 100 | ... | ,, | | 104 | ... | ... | 80 | ... | 80 | ... | 40 | ... | 80 | ... | 23 | ... | 22 |
| 25-3-1954 ... | ... | 3 | 94 | ... | ... | 3 | ,, | | ... | 13 | ... | 10 | 99 | ... | ,, | | 103 | ... | ... | 86 | ... | 86 | ... | 65 | ... | 84 | ... | 12 | ... | 22 |
| 26-3-1954 ... | ... | 8 | 94 | ... | 98 | ... | ,, | | ... | 72 | ... | 67 | ... | 6 | ,, | | 102 | ... | ... | 60 | ... | 60 | ... | 59 | ... | 4 | ... | 11 | ... | 30 |
| 27-3-1954 ... | ... | 7 | 94 | ... | 101 | ... | ,, | | ... | 78 | ... | 18 | ... | 62 | ,, | | 110 | ... | ... | 50 | ... | 4 | ... | 17 | ... | 41 | ... | 38 | ... | 46 |
| 28-3-1954 ... | Maintenance day | | | | ... | ... | ,, | | ... | 13 | ... | | Maintenance | | | | 109 | ... | Maintenance day | | | | | | | | ... | 7 | ... | 12 | Maintenance |
| 29-3-1954 ... | 112 | ... | ... | 14 | 112 | ... | ,, | | ... | 6 | ... | 20 | ... | 90 | Repairs | | 108 | ... | ... | 86 | ... | 87 | ... | 24 | ... | 61 | ... | 3 | ... | 46 |
| 30-3-1954 ... | 111 | ... | 40 | ... | 101 | ... | ,, | | ... | 14 | ... | 14 | ... | 60 | ,, | | 109 | ... | ... | 91 | ... | 94 | ... | 88 | ... | 119 | ... | 3 | ... | 42 |
| 31-3-1954 ... | 110 | ... | 42 | ... | 110 | ... | ,, | | ... | 12 | ... | 92 | ... | 14 | ,, | | 108 | ... | ... | 84 | ... | 14 | ... | 13 | ... | 12 | ... | 77 | ... | 30 |
| | 897 | 149 | 2014 | 49 | 2,713 | 7 | 1,510 | 24 | 1,561 | 690 | 235 | 1,413 | 1,214 | 918 | ... | 437 | 1,513 | 583 | ... | 1,091 | ... | 948 | ... | 534 | ... | 535 | ... | 190 | ... | 898 |

## STATEMENT SHOWING THE MILEAGE COVERED BY DESOTO LORRIES OF VIDHANA SOUDHA DIVISION FOR THE MONTH OF APRIL 1954

| Month and Date | V.S. 1 | V.S. 2 | V.S. 3 | V.S. 4 | V.S. 5 | V.S. 6 | V.S. 7 | V.S. 8 | V.S. 9 | V.S. 10 | V.S. 11 | V.S. 12 | V.S. 13 | V.S. 14 | V.S. 15 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1-4-1954... | 153 .. | 166 ... | 116 ... | Repairs | ... 2 | ... 104 | 100 ... | Repairs | 205 ... | ... 9 | ... 33 | ... 65 | ... 59 | ... 94 | ... 4 |
| 2-4-1954... | 154 ... | 166 ... | ... 64 | 115 ... | ... 1 | ... 100 | 99 ... | ,, | 205 .. | ... 107 | ... 6 | ... 2 | ... 178 | ... 104 | ... 2 |
| 3-4-1954... | 153 ... | 166 ... | 115 ... | 116 ... | ... 87 | ... 83 | Repairs | ,, | 210 ... | ... 97 | ... 3 | ... 13 | ... 5 | ... 127 | ... 95 |
| 4-4-1954... | Maintenance day | | | | | | | | | | | | | | |
| 5-4-1954... | ... 7 | Repairs | ... 13 | 112 ... | ... 118 | ... 123 | ... 84 | ,, | 200 ... | ... 28 | ... 22 | ... 94 | .. 65 | ... 126 | ... 115 |
| 6-4-1954... | ... 8 | ,, | ... 128 | ... 20 | ... 99 | ... 113 | 181 ... | ,, | 211 ... | ... 6 | 90 ... | ... 31 | 105 ... | ... 127 | ... 92 |
| 7-4-1954... | ... 8 | ,, | ... 63 | ... 18 | ... 14 | ... 100 | ... 85 | ,, | 204 ... | ... 127 | 91 ... | ... 5 | ... 94 | ... 103 | ... 35 |
| 8-4-1954... | ... 4 | ,, | ... 60 | 156 ... | ... 97 | .. 92 | ... 98 | ,, | 203 ... | ... 75 | 91 | 6 | ... 73 | 84 | ... 73 |
| 9-4-1954... | ... 6 | ,, | ... 4 | 150 ... | ... 97 | 118 ... | ... 96 | .... 70 | 205 .. | ... 97 | ... 26 | 103 .. | ... 96 | Repairs | ... 95 |
| 10-4-1954.. | 87 ... | ,, | ... 9 | 160 ... | 151 ... | 117 ... | ... 98 | Repairs | 204 ... | ... 96 | ... 97 | 104 ... | ... 96 | ... 20 | ... 96 |
| 11-4-1954... | Maintenance day | | | | | | 98 ... | ... 64 | 204 .. | ... 74 | ... 8 | 104 ... | 111 ... | 36 ... | ... 95 |
| 12-4-1954.. | ... 6 | Do | ... 123 | 158 ... | 152 ... | 118 ... | Repairs | ... 72 | Repairs | ... 99 | .. 75 | 103 ... | 33 ... | ... 105 | ... 98 |
| 13-4-1954... | ... 5 | ... 4 | ... 121 | ... 6 | 151 ... | 117 ... | ... 3 | ... 84 | 205 ... | ... 68 | Repairs | 103 ... | ... 5 | ... 101 | ... 90 |
| 14-4-1954... | ... 6 | ... 3 | ... 122 | ... 3 | 153 | 51 | ... 8 | ... 7 | 205 ... | ... 114 | ... 8 | 103 ... | Repairs | ... 104 | ... 2 |
| 15-4-1954... | ... 7 | 115 ... | ... 126 | ... 3 | ... 3 | 149 ... | ... 104 | .... 108 | 206 ... | ... 127 | ... 83 | 103 ... | 150 ... | ... 117 | ... 111 |
| 16-4-1954... | ... 8 | 115 ... | ... 122 | ... 6 | ... 7 | 150 ... | 50 ... | ... 118 | 205 .. | ... 112 | ... 112 | ... 3 | 77 ... | ... 113 | ... 112 |
| 17-4-1954... | ... 6 | 114 ... | ... 6 | ... 4 | ... 34 | 149 ... | ... 6 | ... 59 | 204 .. | ... 115 | ... 114 | 109 .. | 77 .. | ... 114 | ... 41 |
| 18-4-1954... | 110 ... | 116 ... | ... 9 | ... 19 | ... 48 | 150 .. | ... 104 | Repairs | 204 ... | ... 115 | ... 115 | 109 ... | ... 3 | ... 115 | ... 4 |
| 19-4-1954... | Maintenance day | | | | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... |
| 20-4-1954... | ... 3 | 115 ... | ... 62 | ... 20 | ... 113 | ... 85 | ... 106 | Repairs | 204 ... | ... 115 | ... 115 | 109 ... | ... 3 | ... 115 | ... 4 |
| 21-4-1954... | ... 5 | ... 8 | ... 16 | 128 ... | ... 114 | 100 ... | ... 98 | ,, | 204 ... | ... 115 | ... 120 | 108 ... | 17 | ... 112 | 103 ... |
| 22-4-1954... | 130 ... | ... 3 | ... 121 | 128 ... | ... 106 | 100 ... | ... 103 | ... 64 | 204 .. | ... 92 | ... 112 | 109 ... | Repairs | ... 163 | 103 ... |
| 23-4-1954... | 132 ... | ... 2 | 134 ... | 129 ... | ... 99 | 100 ... | ... 101 | ... 88 | 204 .. | ... 120 | ... 124 | 109 ... | 46 4 | ... 115 | 104 ... |
| 24-4-1954... | ... 11 | ... 3 | 134 ... | ... 3 | 13 | 107 ... | ... 111 | ... 110 | 205 .. | ... 115 | ... 109 | 109 ... | 136 ... | ... 105 | 104 ... |
| 25-4-1954... | Maintenance day | | | | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... |
| 26-4-1954... | 28 3 | ... 4 | ... 76 | 76 ... | 99 ... | 113 .. | ... 50 | ... 101 | 123 ... | ... 111 | ... 49 | Repairs | 135 ... | ... 105 | 104 ... |
| 27-4-1954... | ... 6 | ... 3 | ... 2 | ... 8 | ... 105 | 79 ... | ... 101 | ... 87 | 92 ... | ... 117 | ... 112 | ,, | 135 ... | ... 107 | 111 ... |
| 28-4-1954... | ... 3 | ... 6 | ... 82 | ... 4 | ... 14 | 80 ... | 43 6 | ... 114 | 158 .. | ... 119 | ... 68 | ,, | 135 ... | 16 ... | 23 ... |
| 29-4-1954 .. | ... 10 | 181 ... | ... 56 | ... 4 | ... 103 | 78 ... | ... 80 | ... 92 | 160 ... | ... 124 | ... 123 | ... 85 | 135 ... | 109 ... | ... 17 |
| 30-4-1954... | ... 3 | 181 ... | ... 3 | ... 6 | ... 115 | ... 16 | 99 ... | ... 114 | 160 ... | ... 92 | ... 125 | ... 87 | 135 ... | 110 ... | 112 ... |
| | 947 115 | 1,435 36 | 499 1,388 | 1,428 124 | 719 1,376 | 1,825 867 | 670 1,442 | ... 1,352 | 4,790 ... | ... 2,471 | 272 1,644 | 1,376 391 | 1,410 695 | 271 2,161 | 764 1,177 |

Details of Dodge heavy duty Lorries of Vidhana Soudha Division, Bangalore (7 tons).

| Sl. No. | Lorry Registration Number | Make of the Lorry | Engine and Chassis No. | Date of purchase from M/s. Shivaram Deva Rao Ubhayakar, Bangalore | Date of transfer to other Division | Division to which the Lorry was transferred | No. of Miles covered in this Division | Details of work done in this Division | Remarks |
|---|---|---|---|---|---|---|---|---|---|
| 1 | MY 9582 X (VS 17) ... | Dodge (heavy duty) | T-234-3175 ... 83002141 | 25—3—1944 | 6-11—1954 | Chitaldrug Division ... | 754 miles | Under Repairs of Carburattor, Battery and Engine bearing Local work. | These lorries were found to give a mileage of 6 miles per gallon and 7 miles/gallon on no load. |
| 2 | M Y 9585 X (VS 18) ... | Dodge (heavy duty) | T-234-1786 ... 8300755 | 25—3—1954 | 6-11—1954 | Chitaldrug Division ... | 1,463 ,, | Hired to Contractors Departmental and Collection and Local Work. | |
| 3 | M Y 9586 X (VS 19) ... | Dodge (heavy duty) | T-234-1504 ... 8300477 | 25—3—1954 | 27—8—1954 | Water Supply Division | 250 ,, | Under repairs of Carburattor and Engine trouble and local work. | |
| 4 | M Y 9581 X (VS 20) ... | Dodge (heavy duty) | T-234-3214 ... 83002194 | 25—3—1954 | 29—8—1954 | Water Supply Division | 520 ,, | Under repairs of Carburattor and Engine troubles and Local Work. | |
| 5 | M Y 9587 X (VS 21) .. | Dodge (heavy duty) | T-234-6621 ... 83005915 | 25—3—1954 | 29—8—1954 | Chitaldrug Division ... | 6,720 ,, | Departmental collection of Sand and Local work. | |
| 6 | M Y 9588 X (VS 22) ... | Dodge (heavy duty) | T-234-6167 ... 83004737 | 25—3—1954 | 29—8—1954 | Chitaldrug Division ... | 6,800 ,, | Do | |
| 7 | M Y 9584 X (VS 23) ... | Dodge (heavy duty) | T-234-6167 ... 83005787 | 25—3—1954 | 12—8—1954 | Davangere Division ... | 1,148 ,, | Do | |
| 8 | M Y 9590 X (VS 24) ... | Dodge (heavy duty) | T-234-2087 ... 83000103 | 25—3—1954 | 12—8—1954 | Davangere Division ... | 5,570 ,, | Hired to Contractors and Departmental collection of Sand. | |
| 9 | M Y 9583 X (VS 25) ... | Dodge (heavy duty) | T-234-5153 ... 83004071 | 25—3—1954 | 29—4—1954 | Tumkur Division ... | ... | Under registration and Testing .. | |
| 10 | M Y 9591 X (VS 26) ... | Dodge (heavy duty) | T-234-7018 ... 83005759 | 25—3—1954 | 29—4—1954 | Tumkur Division ... | ... | Do | |
| 11 | Not regd. (VS 27) ... | Dodge (heavy duty) | T-234-2329 ... 83001315 | 25—3—1954 | 30—4—1954 | Hassan Division ... | ... | Do | This lorry was transferred to Hassan without Registration. |
| 12 | MY 9589 X (VS 28) ... | Dodge (heavy duty) | T-234-7849 ... 83006156 | 25—3—1954 | 30—4—1954 | Hassan Division ... | ... | Do | |

(Sd). M. MUNIAPPA,
*Special Engineer,*
*Vidhana Soudha Division.*

| Months | V. S. 17 | | V. S. 18 | | V. S. 19 | | V. S. 20 | |
|---|---|---|---|---|---|---|---|---|
| | C. | D. | C. | D. | C. | D. | C. | D. |
| May, 1954 ... | ... | 12½ G | 2 days | 55 G | ... | 2 G | ... | 28 G |
| June, 1954 ... | ... | 21 G | ... | 48 G | ... | 8½ G | ... | 28 G |

| | V. S. 21 | | V. S. 22 | | V. S. 23 | | V. S. 24 | |
|---|---|---|---|---|---|---|---|---|
| | C. | D. | C. | D. | C. | D. | C. | D. |
| May, 1954 ... | ... | 1,656 (miles) | ... | 189½ G | ... | 46 G | ... | 1,188 (miles) |
| June, 1954 ... | ... | 314½ G | ... | 288 ½G | ... | 71 G | ... | 340 G |

NOTE :— (i) C = Contractor. D = Department.
(ii) As mileage is not noted in the Log Books except in two cases, the consumption of petrol is noted.

Comparative statement showing details of provision for various types of flooring in the estimate of Rs. 50 lakhs, and of Rs. 130 lakhs.

| Sl. No. | Estimate for rupees fifty lakhs | | | | | | Estimate for rupees one hundred and thirty lakhs | | | | | | Differences | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | Item No. of estimate | Item of work | Unit | Qty. | Rate | Cost | Item No. of estimate | Item of work | Unit | Qty. | Rate | Cost | Quantity Excesses or Savings | Cost—Excesses or Savings |
| | | | | | Rs. | | | | | | Rs. | | | |
| 1 | 44 | Flooring with 1½″ thick cement concrete 1 : 2 : 4 over a bed of 6″ lime concrete, plastered with cement 1 : 3 top finished with red oxide cut to tile pattern with wax polishing. | Sqr. | 626·20 | 50 | 31,310 | 45 (*a*, *b*) | Flooring with cement tiles (plain) of different colours, over a base cement concrete of 4½″ thick 1 : 4 : 8 with 1½″ top cement concrete including machine polishing, pointing etc., complete. | Sqr. | 321.00 | 170 | 54,570 | | |
| 2 | 45 | Do without lime concrete bed. | Sqr. | 980.10 | 30 | 29,403 | 46 (*a*, *b*) | Do without bed concrete for I and III floor. | Sqr. | 1465.00 | 130 | 1,90,450 | +181.80 | +1,84,307 |
| | | | | 1601.20 | ... | 60,713 | ... | | ... | 1786·00 | ... | 2,45,020 | | |
| 3 | 46 | Mosaic flooring, prepared to required pattern and colour over a concrete bed of 6″ lime concrete including machine polishing and wax polish finish. | Sqr. | 231.80 | 150 | 34,800 | 47 (*a*) | Providing relief tiles of pattern and colour over 1½″ Cement concrete. | Sqr. | 1170.00 | 165 | 1,93,050 | ... | ... |
| | | | | | | | 47 (*b*) | Do colour cement carpet tiles. | Sqr. | 32.00 | 180 | 5,760 | ... | ... |
| 4 | | Do without bed concrete. | Sqr. | 317.00 | 120 | 38,040 | 48 | Providing mosaic tiles of approved colour over a bed of 4½″ cement concrete 1 : 4 : 8 and 1½″ cement concrete 1 : 2 : 4 including pointing and polishing etc., | Sqr. | 329·00 | 245 | 80,605 | ... | ... |
| | | | | | | | 49 (1.2,3) | Do without base concrete. | Sqr. | 962.00 | 205 | 1,97,310 | ... | ... |
| | | | | | | | 25 (*e*) | Providing mosaic finish to R.C.C. steps. | Sqr. | 133 | 200 | 26.600 | ... | ... |
| | | | | 548.00 | ... | 72,840 | | | | 2626.00 | ... | 5,03,225 | +2078 | +4,30,385 |

| | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 5 | 48 | Flooring and dadoing with white glazed tiles on a bed of 1½" cement concrete with plaster of paris pointing. | Sqr. | 132.80 | 200 | 26,560 | 51 (*a*) | Skirting with plain cement tiles of different colours. | Rft. | 5,959 | 2 | 11,918 | .. | .. |
| | | | | | | | 51 (*b*) | Do with mosaic tiles | L S. | ... | ... | 10,000 | ... | ... |
| | | | | | | | 52 | Mosaic dadoing. ... | L.S. | ... | ... | 7,50 | ... | ... |
| | | | | | | | 31 (*a*) | Ornamental cement plaster finish with base and capital, ordinary pillars. | No. | 120 | 100 | 12,000 | ... | ... |
| | | | | | | | | Do special pillars ... | No. | 312 | ... | 87,800 | ... | ... |
| | | | | | | | 67 (*c*) | Providing ornamental finish to East and West entrance, etc. | | lump-sum | ... | 4,000 | ... | ... |
| | | | | | | | 67 (*d*) | Architectural finish to lift walls etc. | each | 5 | 2,000 | 10,000 | ... | ... |
| | | (*inclusive of 57 sqr. of bath room flooring*). | | 132.80 | ... | 26,560 | | 700 sqr. *nearly, exclusive of bath* room flooring. | | ... | ... | 143,218 | .. | +1,16,658 |
| 6 | 49 | Flooring with marble over a bed of 6" cement concrete 1 : 2 : 4 including cement pointing and finishing. | Sqr. | 121.60 | 600 | 72,960 | 50 (*a*) | Flooring with marble set in cement mortar including cement pointing and machine polishing. | L.S. | ... | ... | 5,000 | ... | ... |
| 7 | 50 | Do over a bed of 1½" cement concrete. | Sqr. | 139.40 | 550 | 76,670 | | | | | | | | |
| | | | | 261.00 | ... | 1,49,630 | | | | ... | ... | 5,000 | (261) | —1,44,630 |
| 8 | 51 | Flooring with vitreous clay tiles on 1½" cement concrete 1 : 2 : 4 including colour cement pointing. | Sqr. | 220.70 | 40 | 8,828 | ... | | | .. | ... | ... | (220·7) | —8,828 |
| 9 | 52 | Dressed burnt stone flooring with cement pointing. | Sqr. | 43.70 | 120 | 5,244 | 44 (*a*) | Dressed burnt stone slab flooring with base. | Sqr. | 257.00 | 165 | 42,405 | ... | ... |
| | | | | | | | 44 (*b*) | Do without base concrete. | Sqr. | 88.00 | 115 | 10,120 | +301.3 | +47,281 |
| | | | | 43.70 | ... | 5,244 | | | | 345·00 | ... | 52,525 | ... | ... |
| 10 | | Flooring and roofing for cellar floor. | L.S. | (266 sqr.) | ... | 75,000 | 50 (*b*) | Warehouse flooring for basement floor. | Sqr. | 195.00 | 110 | 21,450 | —(71.0) | 53,550 |

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| Flooring | 3000.6 Sqr. | Total | 3,98,815 | Flooring | 4952.00 Sqr. | | Total excess in cost ₹ 1,78,631 |
| Allied works | 75.8 Sqr. | | | Allied works | 709.00 Sqr. | 9,70,438 | Total saving in cost 2,07,008 |
| Total | | | 3,98,815 | Total | | 9,70,438 | Difference 5,71,623 |

Comparative Statement of Rates quoted by different tenderers for providing, laying, and polishing, Mosaic Cement Flooring Tiles and other Cement Tiles.

| Sl. No. | Particulars of supply of materials | Approximate quantity in squares | The standard Brick and Tile Co., Ltd., Yelahanka | | The Mysindia Tiles and Engineering Co., Madras—3 | | National Cement Flooring Works, Mysore | |
|---|---|---|---|---|---|---|---|---|
| | | | Rate per 100 s.ft. | Cost | Rate per 100 s.ft. | Cost | Rate per 100 s.ft. | Cost |
| | | | Rs. | Rs. | Rs. | Rs. | Rs. | Rs. |
| (a) | Mosaic flooring tiles of dark green colour using chips of approved grade and colour. | 450 | 200 | Average rate 930÷5=186 | 204 | Average rate 897÷5= 179-6-0 | 200 | Average rate 880÷5= 176-0-0 |
| (b) | Tiles of yellow golden colour with chips and of approved grade and colour. | | 190 | | 193 | | 190 | |
| (c) | Pink colour tiles with chips of grade and colour ... ... | | 190 | | 185 | | 180 | |
| (d) | Red tiles with chips of approved grade and colour ... | | 190 | | 163 | | 160 | |
| (e) | Light grey tiles with chips of approved graded and colour ... | | 160 | 83,700 | 152 | 80,719 | 150 | 79,200 |
| (f) | Plain tiles :- | 1,600 | | | | | | |
| | (i) Black or white ... ... ... | | ... | Black 130 White 135 | Black 105 White 126 | | Black 100 White 120 | ... ... |
| | (ii) Plain dark green ... ... ... | | Average rate 875÷7=125 | 140 | 143 | Average rate 669÷6 | 140 | Average rate 645÷6= 107-8-0 |
| | (iii) Plain dark red ... . . ... | | | 110 | 97 | | 95 | |
| | (iv) Plain grey ... ... ... | | | 100 | 93 | 111—8—0 | 90 | 1,72,000 |
| | (v) Plain pink or buff ... ... ... | | 2,00,000 | Pink 130 Buff 130 | 105 | 1,78,400 | 100 | |
| (g) | Relief tiles similar in design and colour of tiles as provided at the K.R.S. Hotel, or Mandya District Office or Hotel Metropole, Mysore or any other pattern for which sample tiles are to be supplied by the firm for approval : | 500 | 125 | 62,500 | 145 | 72,500 | 140 | 70,000 |
| (h) | Terrazo work with foreign imported chips approved quality ¾" thick including curing, polishing and finishing over a base of concrete prepared by department. | 450 | | | | | | |
| | (*a*) Plain surface ... ... ... | | 350 | Average rate 323-6-0= 1,45,491 | 285 | Average rate 304-5-0 136,941 | 280 | Average rate 300 1,35,000 |
| | (*b*) Curved fluted surface required for pillar finish ... | | 320 | | 325 | | 320 | |
| | (*c*) Skirting for 8" to 10" high ... ... ... | | 300 | | 303 | | 300 | |
| | Total ... | 3,400 | (I) 4,91,691 | | | (II) 4,68,560 | | (III) Lowest 4,56,200 |

I. They undertake to do only 50 per cent of the work (2) There is no mention in regard to the chips that are to be used, *viz.*, foreign imported or Indian.
II. They are prepared to use foreign imported chips provided at least a period of 6 months is given for importing the materials, besides obtaining the necessary licence (2) required electrical energy should be supplied free of cost (3) rates will be 25 per cent more for imported chips.
III. In case of foreign imported chips, the rates will be 25 per cent extra.

(Sd.) M. HUNIYAPPA,
*Special Engineer,*
*Vidhana Soudha Division.* (16—11—54)

## CHAPTER XV (*b*)—ANNEXURE XLII.

Order of the Chief Engineer, on the office Note on the Tenders for the flooring work in Vidhana Soudha.

The types of flooring to be done for each type of room may be decided in the Committtee. The present quantities give roughly the total work to be done and the rates for the different types of flooring. The cost as per lowest quotation has to be provided in the revised estimate. At present only the ground floor is completed and I floor nearing completion. It is stated that the whole building including the 2nd floor has to be completed in one year. As the work is being done on an emergent basis, the flooring also has to be done quickly. Hence, the tenders may be submitted to Government for approving the lowest tender rates of National Cement Flooring Works, Mysore. The approximate value of work to be done is Rs. 4,56,200 as per lower tender rates.

Intd. H. A. 1-12-1954
*Chief Engineer of Mysore.*

## CHAPTER XV (*b*)—ANNEXURE XLIII.

Letter No. 9005-06/RB. 1954-55 dated 4th December 1954 from the Chief Engineer of Mysore, Bangalore, to the Secretary to Government, P.W.D., Bangalore.

*Subject :* Tenders for the flooring of Vidhana Soudha Building.

I write to state that the Special Engineer, Vidhana Soudha Division has submitted three tenders for the work which were received by him.

The types of flooring to be done for each class of room is since decided by the Committee. The present quotations give an idea of the total work to be done and the rates for the different types of flooring. The cost of this item of work will be provided for in the detailed revised estimate under preparation by the Special Engineer.

At present only the ground floor is completed and the first floor is nearing completion. It is also stated that the entire building including the second floor has to be completed in about an year's time from now.

As the work is being done on an emergent basis, the flooring work has also to be done *expeditiously*.

The three tenders together with the comparative statement are forwarded herewith for communicating early approval to the acceptance of the lowest tender of the National Cement Flooring Works, Mysore which works up to Rs. 4,56,200.

(Sd.) H. ANANTHACHAR,
*Chief Engineer of Mysore.*

## CHAPTER XV (*b*)—ANNEXURE XLIV.

Letter No. 134 V S dated 3rd May 1956 from the Special Engineer, Vidhana Soudha Division, Bangalore, to the Chief Engineer of Mysore, Bangalore.

Re: Flooring and other mosaic works of Vidhana Soudha

I write to state that tenders were called for certain items of work. Regarding flooring and other mosaic works, the work was given to Messrs. Boriah, Basaviah & Sons being the lowest tenderers.

During execution, it has become necessary to do other items of work outside the tender and it is proposed to pay the rates as detailed below for these new items based on similar items of work included in the tender.

(1) Light grey and black mosaic tiles for verandahs with pink borders and the tiles set diagonally.

The tendered rate for grey mosaic is Rs. 150 per square and that for pink mosaic is Rs. 180 per sq ; it is proposed to give the average of these two rates for light grey and black mosaic tiles. This works out to Rs. 165 per square.

(3) The tendered rate for mosaic skirting is Rs. 300 per square. It is proposed to apply the same rate to mosaic dadoing also.

(3) Red skirting in situ is not one of the tendered items. A suitable rate has to be fixed for this. The difference in rate between mosaic skirting and mosaic flooring (average rate) is Rs. 100 (300-200) while the rate for dadoing is 1½ times that for the flooring.

For red flooring the tendered rate is Rs. 95 per sq.

For red skirting it is proposed to pay 1½ times the rate for red flooring. This will be Rs. 95 + 47½ = 142-8-0 per sq.

(4) The tendered rate for terrazo work plain surface is Rs. 280 per sq. It is proposed to pay at this rate for the work on plain surface of pillars. For curved and fluted surface the tendered rate is Rs. 320 per sq. which will be applied for curved surface. For complicated curved surface with flowers, etc., the same rate will be paid applying a suitable co-efficient for the area in view of complicated surface.

(5) For step tiles which are of pink mosaic it is proposed to apply the mosaic skirting rate *i.e*, Rs. 300 per sq. since the tiles are of special pattern and the labour involved is more.

I request your kind approval to the above proposals which are based on similar items of work covered by the tender rates.

## COMPARATIVE STATEMENT OF PLAIN AND MOZAIC TILE

I As per tenders.—II As per Rs. 130 lakhs estimate.—

| I As per tenders | | | | | II As per provision in Rs. 130 lakhs estimate | | | | |
|---|---|---|---|---|---|---|---|---|---|
| Serial No. | Items of work | Quantity | Rate as tendered | Cost | Sl. No. of estimate | Item of work | Quantity | Rate | Cost |
| 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 |
| | I. MOZAIC TILES. | | Rs. a. | Rs. | | | | Rs. | Rs. |
| (a) | Providing and fixing dark green mozaic tiles as per specification. | Sqr. | 200 0 | ... | 48 | Mozaic tiles of approved colour 1½" cement concrete levelling course over cement concrete 1 : 2 : 4 of 4½" thick including pointing and polishing. | 329 | 245 | 80,605 |
| (b) | Yellow or golden colour ... | " | 190 0 | .. | | | | | |
| (c) | Pink ... .. | " | 180 0 | ... | | | | | |
| (d) | Red tiles ... ... | 450 | 160 0 | ... | 49 (1, 2, 3) | Do without bed concrete. | 962 | 205 | 1,97,210 |
| (e) | Light grey .. ... | | 150 0 | ... | | & Do finish ... ... | | | |
| | | | | | 25 (e) | Mozaic Finish for R.C.C. steps. | 133 | 200 | 26,600 |
| | Total ... ... | 450 | av. rate 176 0 | 79,200 | | | 1,424 | ... | 3,04,415 |
| | II. PLAIN TILES. | | | | | | | | |
| (f) | (i) (a) Black... ... | Sqr. | 110 0 | ... | 45 (a & b) | Plain cement tile flooring of colour and pattern over 4½ cement concrete bed 1 : 2 : 4 and 1½" c. concrete levelling course. | 321 | 170 | 54,570 |
| | (b) White ... | " | 120 0 | .. | | | | | |
| | (ii) Dark green ... | " | 140 0 | ... | | | | | |
| | (iii) Dark red ... | 1,600 | 95 0 | ... | | | | | |
| | (iv) Grey ... | | 90 0 | ... | | | | | |
| | (v) Pink or buff ... | | ... | ... | 46 (a to d) | Do do without bed concrete including pointing and polishing. | 1,465 | 130 | 1,90,450 |
| | Total ... ... | 1,600 | av. rate 107 8 | 1,72,000 | | | 1,786 | ... | 2,45,020 |
| | III RELIEF TILES. | | | | | | | | |
| (g) | All colours and design ... | 500 Sqr. | 140 0 | 70,000 | 47 (a) | Relief tiles of pattern and colour. | 1,170 Sqr. | 165 | 1,93,050 |
| | | | | | 47 (b) | Colour cement and carpeting with tiles. | 32 | 180 | 5,760 |
| | Total ... ... | 500 | 140 0 | 70,000 | | | 1,202 | ... | 1,98,810 |
| | Grand Total for flooring ... | 2,550 | ... | 3,21,200 | | | 4,412 | ... | 7,48,245 |
| | IV. OTHER TYPES OF FLOORINGS. | | | | | | | | |
| | Proposed to be done by the Department. | ... | ... | ... | 44 (a) | Dressed granite slab floorings over concrete bed, etc. | 257 | 165 | 42,405 |
| | | | | | 44 (b) | Do without bed concrete. | 83 | 115 | 10,120 |
| | | | | | 50 (a) | Marble flooring ... ... | L.S. | ... | 5,000 |
| | | | | | 50 (b) | Warehouse flooring ... | 195 | 110 | 21,450 |
| | | | | | | | | | 78,975 |
| | Grand Total for flooring ... | 2,550 | ... | 3,64,200 | | | 4,952 | ... | 8,27,220 |
| | V. TERRAZO. | | | | | | | | |
| (a) | Plain surface ... .. | | 280 0 | ... | 52 (a) | Mozaic dado wherever necessary. | L.S. | ... | 7,500 |
| (b) | Curved or fluted surface for pillars, etc. | 450 | 320 0 | ... | 67 (d) | Architectural finish to left wall. | 5 | 2,000 | 10,000 |
| (c) | Skirting for 8" to 10" high. | | 300 0 | ... | 31 (a & b) | Cement plaster finish for pillars. | L.S. | ... | 99,800 |
| | | | | | 67 (c) | Ornamental finish for east and west entrances. | L.S. | ... | 4,000 |
| | | | | | 51 (a) | Skirting with cement tiles ... | 5,959 R.ft. | 2 | 11,918 |
| | | | | | 51 (b) | Do with mozaic tiles ... | L.S. | ... | 10,000 |
| | Total ... ... | 450 | av. rate 300 0 | 1,35,000 | | | ... | ... | 1,43,218 |
| | GRAND TOTAL ... | 2,550 sq. 450 sq. a | flooring llied work | 4,99,200 s | | | 4,952 sq. of terr | exclusive azo L.S. | 9,70,438 |

| | Quty. | | Cost Rs. | | Quty. | | Cost Rs. |
|---|---|---|---|---|---|---|---|
| (1) Flooring ... | 2,950 | Sqr. | 3,21,200 | (1) Flooring ... | 4,952 | Sq. | 8,27,200 |
| (2) Allied Works ... | 450 | Sq. | 1,35,000 | (2) Allied Works ... | L.S. | | 1,43,218 |
| | | | 4,56,200 | | | | 9,70,418 |

Remarks.—
(a) Non-tendered item of work.
(b) Estimate Rate is taken as rate is yet to be fixed on data.
(c) Departmental work of plain red cement floorings.
(d) Rate not settled
(e) Departmental work, rate not finalised.

FLOORING, TERRAZO, DADOING AND OTHER ALLIED WORKS.

III As per recommendation of Technical Committee.—IV As per actuals.

| III As per recommendation of Technical Committee (Dated 2-12-1954) | | | | | IV As per actual execution | | | | |
|---|---|---|---|---|---|---|---|---|---|
| Serial No. | Item of work | Quantity | Rate as tendered | Cost | Serial No. | Item of work | Quantity | Rate as tendered | Cost |
| 11 | 12 | 13 | 14 | 15 | 16 | 17 | 18 | 19 | 20 |
| | | | Rs. T. R | Rs. | | | | Rs. a. T. R | Rs. |
| (a) | Green Mozaic ... ... | 405 | 200 | 81,000 | (a) | Green Mozaic .. ... | 340·5 | 200 0 | 68,100 |
| (b | Yellow or golden colour ... | 81 | 190 | 15,390 | (b) | ... | | | |
| (c) | Pink ... ... | 114 | 180 | 20,520 | (c) | Pink ... ... | 72·9 | 180 0 | 13,122 |
| (e) | Grey ... | 413 | 150 | 62,450 | (e) | Grey ... .. | 77. | 150 0 | 1,15,650 |
| | Do for III floor ... | 805 | 150 | 1,20,750 | (f) | Buff (classified as yellow) ... | 485·6 | 190 0 | 92,264(*a*) |
| | | | | | ( ) | Bath rooms yellow .. | 57 | 190 0 | 10,830(*a*) |
| | | | | | 25 (c) | Mozaic finish for steps ... | 90 | 200 0 | 18,000(*b*) |
| | Total ... | 1,848 | .. | 3,04,110 | | | 1,817·0 | ... | 3,18,966 |
| | Red ordinary ... ... | 775 Sqr. | 95 | 73,625 | | Plain red-tiles as per tender specification. | 808 Sqr. | 95 0 | 76,760 |
| | | | | | | Do red done departmentally. | 145 | 45 0 | 6,525(*c*) |
| | Total ... | 775 | 95 | 73,625 | | Total including depatl. work... | 953 | ... | 83,285 |
| | Red relief ... ... | 153 | 140 | 21,420 | | Check pattern tiles alternate grey and black. | 816·6 | 160 0 | 1,30,656 |
| | Carpet tiles ... ... | 746 | 140 | 1,04,440 | | Chequered pattern for Council Hall gallery—Council Hall. | 42 | 180 0 | 7,56 (*d*) |
| | Total ... | 899 | ... | 1,25,860 | | Total ... ... | 858·6 | ... | 1,38,216 |
| | Grand Total ... | 3,522 | ... | 5,03,595 | | Contractor's work only ... | 3483 6 | ... | 5,23,942 |
| | | | | | | Including departmental work | 3628·6 | .. | 5,40,467 |
| | DEPARTMENTAL WORK. | | | | | | | | |
| | | | | | 41 (a) | Slabbed flooring ... ... | 348 Sqr. | 275 0 | 95,700 (*e*) |
| | | | | | 50 (b) | Warehouse flooring ... | 386 | 95 0 | 36,670 (*e*) |
| | | | | | | | 734 | | 1,32,370 |
| | Total ... | 3,522 | ... | 5,03,595 | | Total including Departmental | 4362·6 | ... | 6,72,837 |
| | | | | | | | | T. R. | |
| | | | | | 52 (a) | Plain dado ... .. | 414 | 280 0 | 1,15,920 |
| | | | | | | | | T. R. | |
| | | | | | (b) | Do curved surface ... | 155 41 | 320 0 | 49,741 |
| | | | | | 51 (a | Plain red skirting ... ... | 110 | 142 8 | 15,675 |
| | No details fixed up— (Details considered to be same as in 190 lakhs estimate). | | | 1,43,218 | | (b) Mozaic do ... ... | 202 | T. R. 300 0 | 60,600 |
| | Total ... | 3,522 | ... | 6,46,813 | | | 891 44 | ... | 2,41,936 |
| | GRAND TOTAL ... | 3,522Sq. Terrazo | flooring ) L. S. ) | 6,46,813 | | Total ... ... | 5244·04 | ... | 9,14,773 |

| | Quty. | | Cost Rs. | | Quty. | | Cost Rs. |
|---|---|---|---|---|---|---|---|
| (1) Flooring ... | 3,522 | Sq. | 5,03 595 | (1) Flooring ... | 4362·60 | Sq. | 6 72 837 |
| (2) Allied works ... | L.S. | | 1,43.218 | (2) Allied Works ... | 881·44 | | 2,41,936 |
| | | | 6,46,813 | | | | 9,14,773 |

## BENEFITS TO THE TENDERED CONTRACTOR ON THE FLOORING AND ALLIED WORKS

(Based on the Quantities given in the Workslips)

### Flooring Work.

It has been elaborated that apart from certain concessions, as free power and water charges for manufacture of tiles, allowing for work on sub-contract, constructing of cisterns for curing tiles at departmental cost, etc., not originally contemplated, but shown to the contractor, the main benefit to the contractor has been in the heavy rates quoted by him, giving him a neat margin of profit.

It may be that his rates were the lowest amongst the three tenders received, but these rates were actually higher than the local prevalent rates for similar work, and an" examination of the suitability of the rates quoted by the lowest tenderer," as directed by the Chief Engineer before accepting the tenders and entrusting the work, would have definitely been conducive to economy.

The following give an idea of the rates at which such kinds of flooring were done or proposed to be done, by other firms, in other works at Bangalore, round about the same period.

(i) Supplying and laying and polishing grey cement sub zero tiles $1\frac{1}{4}$" thick heavy duty of 10 tons s.ft. without screeding, and inclusive of water supply and power charges done by Modern Tile Coy. of Bombay, for Bharath Electronics Ltd., during 1956—Rs. 160 per square.

(ii) Supplying and laying and polishing yellow or buff coloured mosaic tiles $\frac{3}{4}$" thick without screeding inclusive of incidental charges, complete,done by Messrs. Mysore Engineers, Bangalore, for the Oriental Insurance Buildings, during 1954-55—Rs. 175 per square.

(iii) Flooring with light grey mosaic tiles of approved quality and colour, on a bed of 4" thick cement concrete I : 4 :8, laid on well tamped gravel and 2" sand and ground by polishing machine, and finished with approved polish, after final grinding with oxalic acid, as per specification, done by Sri V. Rama Murthy, for the Bangalore Medical College in 1955-56—Rs. 200 per square.

(Deleting the lime concrete bed of 4" and sand 2" the rate would be Rs. 167 per square).

(iv) Quotations have been obtained by the Indian Telephone Industries recently, for flooring work in the hospital building and the lowest rates of Messrs. Meccano Flooring Ltd., College Rood, Coimbatore for different kinds of flooring are as under:—

Supplying, laying and polishing mosaic tiles, without screeding and electric charges.

(a) Green coloured tiles ... ... ... Rs. 130 per 100 sft.

(b) All other coloured tiles, such as yellow, red, pink, Marigold, Badami, Yellow etc., except green and grey tiles. Rs. 120 per 100 sft.

(c) Grey coloured tiles ... ... Rs. 90 per 100 sft.

(v) For the mosaic flooring work for the control room of the generating station, Jog, the Electrical Department had invited tenders, and accepted the tender of Messrs. Standard Brick and Tile Coy. (Yelahanka), Ltd.,

The details were as under:...

(a) Supplying mosaic tiles in grey colour with white chips--Rs. 95 per square (225 Nos of 8" × 8" tiles)

(b) Labour charges for fixing the mosaic tiles including polishing and pointing suitably—Rs. 45 per sq.

Taking into consideration the sales-tax at 0-0-3 per rupee for the cost of tiles, and allowing for Rs. 15 per sq. the laying course, the rate per square of "Laying and polishing, grey mosaic tile flooring" would be Rs. 156-8-0 per square at Jog, the firm being in Bangalore.

The same work at Bangalore, would have cost Rs. 125 to Rs. 130 per square.

In consideration of the above, and allowing for the $\frac{3}{4}$" laying or screeding course in cement mortar which at best works out to Rs. 13 per square, the large work involved, the urgency, the lift charges with three floors, and for the contractor's profit of 10 per cent as well, the following would have been fair and reasonable rates for the complete work of supplying, laying, polishing and finishing, inclusive of water supply and electric chares and with the screeding course.

(i) Greycoloured tiles 90+13+5+11=119 per sq.

(ii) Green coloured tiles 130+13+5+15=163 per sq.

(iii) Other colours I20+I3+5+14=152 per sq.

### 2. Allied works.

In the case of the allied works, as skirting, dadoing and other mosaic finishes to architraves, pillar bases and capitals. etc, rates for actual comparison are not readily available. But the following are considered to work out a reasonable rate.

(i) $\frac{3}{4}$ inch thick terrazo finish, including screeding, done by Messrs. Modern Tile Coy., Bombay, for Bharat Eletronics in 1955-56 Rs. 183 —per square.

Deleting the screeding work $\frac{3}{4}$ inch thick of 1 cement 1 lime and 6 sand, which is estimated to cost Rs. 10—the rate would be Rs. 173 per square.

(ii) Dadoing with white mosaic, with white chips, including bends cornices, angle and finished as per specification and design, with pink border at top done by Sri V. Ram Murthy, for the Bangalore Medical College, during 1955-56—Rs. 245 per sq.

(iii) $\frac{3}{8}$ inch finish for circular columns and for architraves at the Eastern ends of rear vestibuel, central block, done departmentally in Vidhana Soudha in 1956 Rs. 164-1-0 per square.

(iv) 3/8 inch thick terrazo including cut and polished finish (by hand). excluding screeding, for vertical work as skirting, dado, risers, treads, etc., with dark shades of blue or green mineral pigments, and with aluminium dividing strips, etc., (*vide* items 1174, 1176, 1777 and 1183 of M.E.S. specifications 1954) Rs. 186-12-0 per square.

Adding extra for curved surface finish of lumpsum of 13·88 sq. the total cost for a dark shaded finish would be Rs. 200 per square and that for a light-shade finish, Rs. 190 nearly.

As in the case of flooring work, considering the intricate finishes of curved, fluted and flowered designs, the lift charges, etc., the overall rate for 3/8 inch thick terrazo finish, with indigenous chips, inclusive of the contractor's profit of 10 per cent could have been at best 195+5+20 or Rs. 220 per square and that for plain surface, Rs. 180+5+19 or say Rs. 205 which rates are quite liberal.

### 3. Benefit to the contractor.

Based on these reasonable rates as derived, and on the actual work turned out and the amount proposed to be paid to the contractor, as per his tendered rates, the following statement details the extra amount involved for being paid to him, irrespective of the periodical changes in the pattern of flooring.

A- Flooring—

| Item of work | Qty. of work (as per workslips) in sq. | Tendered rate per sq. | Rates as per workslip (per sq.) *i.e.*, proposed to be paid to the contractor after deducting cost for levelling course. | Reasonable rates as per note (per sq.) | Difference between cols. 3 & 4 (per sq.) | Difference between cols. 3 & 5 (per sq.) | Extra cost involved. |
|---|---|---|---|---|---|---|---|
| | | Rs. | Rs. | Rs. | Rs. | Rs. | Rs. |
| (i) Red cement tiles ... | 808 | 95 | 130-21=109 | 95 | 14 | | *11,312 |
| (ii) Check pattern tiles ... | 800 | Not tendered | 195-21=174 | 163 | | 11 | †3,800 |
| (iii) Carpet or check pattern tiles for council hall. | 32 | Not tendered | 195-21=174 | 163 | | 11 | †352 |
| (iv) Mosaic.—(a) Grey ... | 764 | 150 | 170-21=149 | 119 | 1 | 31 | ‡23,684 |
| (b) Green ... | 341 | 200 | 230-21=209 | 163 | 9 | 37 | §12,617 |
| (c) Pink ... | 73 | 180 | 220-21=199 | 152 | 19 | 28 | ‖2,044 |
| (d) Yellow & buff | 486 | 190 | 210-21=189 | 152 | 1 | 38 | **18 468 |
| Total ... ... | 3,304 | ... | ... | ... | ... | ... | 77,277 |

Cost of screeding work ($\frac{3}{4}$" cement mortar 1:3)—cost of materials (Rs. 9 8 0) and cost of labour (Rs. 3-8-0) or Rs. 13 per sq.

Cost of levelling course $1\frac{1}{2}$" cement concrete 1-2-4—cost of materials (Rs. 18-1-0) and cost of labour (Rs. 2-12-0, or Rs. 21 per sq.

*The tendered rate ha been taken as reasonable. The workslip provide for a higher rate.

†Reasonable rate is considered as the rate of the costliest type of green colur and hence diff. between Col. 4 and 5 considered.

‡w/s provides for a lesser rate than the tender rate.

‖ w/s provides for a higher rate than the tender rate.

**w/s provides for a lesser rates than the tender rate. The rate for buff coloured flooring is stated to have not been settled.

B. Allied works,

| | Qty. as per workslip. | Rate as per workslip | Rasonable rate | Difference | Amount |
|---|---|---|---|---|---|
| | | Rs. | | | Rs. |
| (i) Skirting with cement tiles. ... | 20,000 rft or 133 squares at 8" height | 1-4-0 rft. | 105 sq. | | (25,000-13,965 or 11,035 |
| (ii) skirting with mosaic tiles. ... | 192 sq. | 250 sq. | 166 sq. | 84 | 16,128 |
| (iii) Dadoing, pillars, architraves, etc. ... | 570 sq. | 280 sq. | 213 (Av) | 67 | 38,190 |
| Total ... | ... | ... | ... | ... | 65,353 |

NOTE:—for item (i) the rate has been based on rate for red cement tiles (A—(i) with an addition of Rs. 10 for vertical surface for item (ii) the rate is based on the average of a—(iv) b, c and d with an addition or Rs. 10 for vertical surfaces, and for item (iii) the average of the rates derived in the note of Rs. 205 and Rs. 225 per square.

**Conclusions:**

It could therefore be seen that, with the abnormal rates tendered by the contractor, even though they might have been the lowest amongst the three tenders received, the contractor, in addition to the usual 10 per cent margin of profit, stands to gain nearly Rs. 1,42,630 even after liberal provisions in the reasonable rates, based on actuals, datas, etc. The other concessions, originally not contemplated, but shown to him, would have even with under-estimation, cost him about Rs. 17,370 The undue benefit to the contractor in the item of flooring and allied works for the works turned out by him can therefore be put down as Rs. 1.6 lakhs.

**Note on the loss to Government in Flooring Works with bad planning and want of proper care in accepting the tender.**

According to the proceedings of the Technical Committee, which met on 16th March 1954, mosaic flooring in situ had to be adopted for special chambers and halls, if terrabond strips were available. If otherwise, mosaic tiles had to be adopted. Regarding general offices, red oxide finished cement floor, had been decided to be adopted.

In the tenth meeting of the Committee on 2nd December 1954, the following amongst other decisions were taken :—

(*i*) For all offices, plain red cement tiles, may be used.
(*ii*) For verandah, relief tiles may be used.
(*iii*) For Dining hall, cabinet room, etc., mosaic tiles may be used.
(*iv*) All foyar halls may be finished with terrazo and mosaic.

Based on the above, the break-up for the types of flooring to be adopted in the entire building, inclusive of the third floor, would be as under :—

1. *Mosaic flooring.*—

| | | |
|---|---|---|
| (*a*) Minister's chambers and cabinet room ... ... | 375 sq. | 1,090 Sqrs. |
| (*b*) Dining and foyar halls ... ... | 305 ,, | |
| (*c*) Party room conference hall, visitors' galleries, balcony floors, bath rooms, etc. | 410 ,, | |

2. *Relief tile flooring.* –
Verandahs and corridors (excluding ground floor verandah)... 1,080 ,,

3. *Ordinary flooring.*—
General offices, library lobbies, vestibules, etc. ... ... 1,458.6 ,,

In order to find out the total cost on the flooring work, according to the above break-up, as per the decisions of the Technical Committee, the following are considered :

(*i*) The type of mosaic flooring 1 (*a*) to be austere or of the costly green colour.
(*ii*) The flooring of the dining and foyar halls to be of different colours.
and (*iii*) The mosaic flooring 1 (*c*) to be of the simplest grey colour.

The reasonable rates for these works of different types of flooring have been worked out as Rs. 163 and Rs. 152 and Rs. 119 per square respectively. (*vide* Annexure No. XLVI)

Regarding the relief tile flooring for the verandahs and corridors, the lower rate of Rs. 125 per square quoted by the Yelahanka Tile Coy., Bangalore, and for the ordinary red oxide cement flooring, the tendered rate of Rs. 60 per square for the Accountant General's Office, have been considered.

The schedule of cost will be as under :—

**Flooring Work**

| | Rs. |
|---|---|
| (*i*) 375 sq. of Green mosaic tile flooring at Rs. 163 per sq. ... | 61,125 |
| (*ii*) 305 sq. of mosaic tile flooring of different colours at Rs. 152 per sq. | 46,360 |
| (*iii*) 410 sq. of grey mosaic tile flooring at Rs. 119 per sq. ... ... | 48,790 |
| (*iv*) 1,080 sq. of relief tile flooring at Rs. 125 per sq. ... ... | 1,35,000 |
| (*v*) 1,458.6 sq. of ordinary red oxide cement flooring at Rs. 60 per sq. | 87,516 |
| Rs. | 3,78,791 |

Hence, for want of proper planning, by adhering to the recommendations of the Technical Committee and for want of proper care in the acceptance of the tender, the Government is put to a loss of Rs (5,33,942 3,78,791) or Rs. 1,55,151. A much larger savings would have been possible, by resorting to ordinary type of flooring for the Ministers' rooms and the cabinet room also, as the floors of these rooms were proposed to be provided with carpets.

**Allied Works**

The provision in the 130 lakhs estimate for this work is on lumpsum basis, the amount being Rs. 1,43,218 ; This corresponds to an area of nearly 450 squares, at the average tender rate of Rs. 320 per square. The Technical Committee has not discussed and decided on the area of this allied work.

The quantity of work actually executed is 881·44 sqrs., comprising 570 squares of intricate terrazo work and 311·44 squares of skirting and other works ; the reasonable rates for these items of works, have been worked out as Rs. 213 average per sq., and Rs. 136 average per sq. respectively (*vide* Annexure No. XLVI).

According to the average tender rate, the total work is to cost nearly Rs. 2,82,000 ; Even considering that the entire work of 881 44 squares was necessary, the total cost at the average reasonable rate of Rs. 213, would have been only about Rs. 1,88,000 ;

Thus, owing to the abnormal tender rate, and increase in the quantity of work to nearly twice the original provision, the loss to Government could be put down as (2·82—1·88) or Rs. 94,000 nearly.

Thus the total loss to Government in the case of the flooring and the allied works is Rs. (1,55,151+94,000) or Rs. 2.50 lakhs nearly,

Statement showing the purchase of J.W. Planks and other centering materials from October 1953 to 18th January 1954.

| Serial No. | Name of the supplier | 3″×2″ scantlings | | 2″×1½″ scantlings | | 4″×2″ scantlings | | J. W. planks | | Reepers | | Total |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | Quantity at Rs. 5-7-0 and Rs. 5-1-6 Cft. | Cost | Quantity at Rs. 5-4-0 Cft. | Cost | Quantity at Rs. 5-7-0 Cft. | Cost | Quantity at Rs. 5-8-0 Cft. | Cost | Quantity at Rs. 24-12-0, Rs. 30-0-0, Rs. 32-8-0 and Rs. 35-0-0 per 1,000 R.ft. | Cost | |
| | | Cft. | Rs. a. p. | Cft. | Rs. a. p. | Cft. | Rs. a. p. | Cft. | Rs. a. p. | Rft. | Rs. a. p. | Rs. a. p. |
| 1 | A. K. Ahmed ... | 1,052 | 5,578 8 6 | 331 | 1,748 11 0 | ... | ... | ... | ... | 19,620 | 634 11 0 | 7,961 14 6 |
| 2 | Abdul Mazeed ... | ... | ... | ... | ... | ... | ... | 487 | 2,685 4 0 | ... | ... | 2,685 4 0 |
| 3 | Md. Zakria ... | ... | ... | ... | ... | ... | ... | 30 | 165 0 0 | ... | ... | 165 0 0 |
| 4 | Azeez & Co. ... | 463 | 2,367 4 6 | 203 | 1,075 15 0 | 18 | 98 7 0 | 487 | 2,687 0 6 | 12,630 | 429 13 0 | 6,658 8 0 |
| 5 | Murthusa Beig ... | 277 | 1,424 2 9 | 47 | 248 1 0 | ... | ... | 136 | 752 8 0 | 6,570 | 211 15 6 | 2,636 11 3 |
| 6 | Abdul Waheed Khan ... | 30 | 155 12 0 | ... | ... | ... | ... | 261 | 1,436 10 0 | 2,000 | 69 8 0 | 1,661 14 0 |
| 7 | Basheed Ahmed ... | 117 | 599 12 0 | 124 | 654 15 0 | ... | ... | 270 | 1,484 0 0 | 6,000 | 148 8 0 | 2,887 3 0 |
| 8 | Hafeezulla Khan ... | ... | ... | ... | ... | ... | ... | ... | ... | 3,500 | 107 8 0 | 107 8 0 |
| | Total ... | 1,939 | 10,125 7 9 | 705 | 3,727 10 0 | 18 | 98 7 0 | 1,671 | 9,210 6 6 | 50,320 | 1,601 15 6 | 24,763 14 9 |

Total scantlings ... 2,662 Cft. ... Rs. 13,951—8—9.

| | | |
|---|---|---|
| October 1953 | ... Rs. 732-13—0 | |
| November 1953 | ... Rs. 1,968—1—0 | |
| December 1953 | ... Rs. 5,990-12—0 | |
| | | = Rs. 8,691-10—0 |
| January 1954 (up to 18th January 1954) | ... | = Rs. 16,072—4—9 |
| Total | ... | Rs. 24,763-14—9 |

Purchase made from 19th January 1954 to 15th March 1955 as against the quantities, mentioned in the Tender Notification.

| | | *As per notification* | *Actual purchases made from 19th January 1954 to 15th March 1955.* | |
|---|---|---|---|---|
| I | Planks | ... 4,000 Cft. ... | 9,382 Cft. | |
| II | Scantlings 2″×1½″ | ... 1,000 Cft. ... | 996 Cft. | Extra cost is incurred in these two varieties as per details noted below. |
| III | Scantlings 3″×2″ and 4″×2″ | ... 1,000 Cft. ... | 4,427 Cft. | |
| IV | Reepers 2″×1″ | ... 13,000 Rft. ... | 63,300 Rft. | |

Extra cost incurred with respect to Scantlings of purchases made from 19th January 1954 to 15th March 1955.—

| | | | | | Rs. | a |
|---|---|---|---|---|---|---|
| II | Scantlings 2″×1½″ Lowest tender rate Rs. 4-8-0 (Thimme Gowda). | 996 Cft. ... | 270 Cft. from Thimme Gowda at Rs. 4-8-0. 726 Cft. from others including Murthuza Beig at Rs. 5-2-0. | Extra cost for 726 Cft. at Re. 0-10-0 ... | 453 | 12 |
| III | Scantlings 3″×2″ and 4″×2″. | 4,427 Cft. ... | 291 Cft. from Thimme Gowda at Rs. 4-10-0. | Extra cost at Re. 0-4-0 per Cft. ... | 72 | 12 |
| | Lowest tender rate Rs. 4-6-0 (B. N. A. Furniture). | ... | 4,136 Cft. from others at Rs. 4-14-0. | Extra cost at Re. 0-8-0 per Cft. ... | 2,068 | 0 |
| | | | | Total extra cost ... | 2,594 | 8 |

## J.W. Planks, Scantlings and Reepers.

Statement showing the quantities supplied by each contractor.

| Order No: | Date | Name of the firm | Planks Cft. | Scant-lings Cft. | Reepers Rft. | Date of Supply |
|---|---|---|---|---|---|---|
| | | Sriyuths— | | | | |
| 79—208 | 22—1—54 ... | Thimme Gowda ... | 300 | 200 | 3,000 | 22—3—54 |
| 89—218 | 29—1—54 ... | A. K. Ahmed ... | 202 | ... | ... | 1—2—54 |
| 100—228 | 9—2—54 ... | Do ... | ... | 265 | ... | 9—2—54 |
| 101—229 | 9—2—54 ... | Azeez & Co. ... | ... | 125 | ... | 16—2—54 |
| 111—240 | 16—2—54 .. | Murthuza Baig ... | 225 | ... | ... | 12—2—54 |
| 253—224 | 27—2—54 ... | Azeez & Co. ... | 500 | 650 | | 3—3—54 |
| 254—225 | 27—2—54 .. | A. K. Ahmed ... | 500 | 550 | 8,000 | 8—3—54 |
| 255—226 | 27—2—54 ... | Murthuza Baig, G ... | 108 | 106 | ... | 19—2—54 |
| 267—238 | March 54 .. | Do ... | ... | 104 | 700 | 12—3—54 |
| 296—267 | March 54 ... | Do ... | 85 | 109 | ... | 17—3—54 |
| 301—272 | 23—3—54 ... | Thimme Gowda ... | 500 | ... | ... | 23—3—54<br>29—4—54 |
| 302—273 | 23—3—54 ... | Azeez & Co. ... | 500 | 450 | 7,000 | 31—3—54<br>1—5—54 |
| 303—274 | 23—3—54 ... | A. K. Ahmed ... | 500 | 450 | 7,000 | 8—4—54<br>9—4—54 |
| 305—276 | March 54 ... | B. Kempiah & Sons ... | 400 | ... | ... | 6—4—54<br>16—4—54 |
| 311—282 | March 54 ... | B. Murthuza Baig .. | 151 | ... | ... | 3—3—54 |
| 27—25 | 15—4—54 ... | Azeez & Co. ... | 250 | 300 | ... | 5—6—54 |
| 69—68 | 28—4—54 ... | B. Kempiah & Sons ... | 880 | ... | ... | 27—4—54 |
| 175—174 | 31—5—54 ... | Do ... | 500 | ... | ... | 14—6—54 |
| 186—184 | 7—6—54 ... | Azeez & Co. ... | ... | 250 | ... | 2—7—54 |
| 264—263 | 30—6—54 ... | Do ... | ... | 125 | ... | 16—7—54 |
| 311—310 | 15—7—54 ... | A. K. Ahmed ... | ... | 100 | ... | 16—7—54 |
| 368—367 | 6—8—54 ... | B. Kempiah & Sons ... | 600 | ... | ... | 23—8—54 |
| 381—380 | 11—8—54 ... | G. Murthuza Baig ... | ... | 150 | ... | 12—8—54 |

## Abstract at receipt from each firm.

| | *Planks Cft.* | *Scantlings Cft.* | *Reepers Rft.* |
|---|---|---|---|
| (1) Thimme Gowda ... ... | 800 | 200 | 3,000 |
| (2) Azeez & Co. ... ... | 1,250 | 1,900 | 7,0 0 |
| (3) A. K Ahmed ... ... | 1,202 | 1,365 | 15,000 |
| (4) B. Kempiah & Sons ... | 2,380 | .. | ... |
| (5) G. Murthuza Baig ... ... | 569 | 469 | 700 |
| Total ... | 6,201 | 3,934 | 25,700 |

(Sd.) M. MUNIAPPA,
*Special Engineer, Vidhana Soudha Division.*

Purchases made from 16th March 1955 to 18th June 1955—The period during which the quotation of Messrs. Kempiah & Sons was in force.

The rates of M/s. Kempiah & Sons:—
Planks ... Rs. 5 6 0 Cft.
Scantlings ... ,, 4 6 0 ,,
Reepers .... ,, 33 0 0 per 1,000 Rft.

| Name of the Article | Total purchase made during the period abovementioned | A. K. Ahmed | Azeez & Co. | Murthusa Beig | Kempiah & Sons | Extra Cost |
|---|---|---|---|---|---|---|
| | | Cft. | Cft. | Cft. | Cft. | |
| I. Planks ... ... | 3,815 Cft. ... | 539 @ Rs. 5-6-0 ... | 911 @ Rs. 5-8-0 ... | 145 @ Rs. 5-8-0 ... | 2,220 @ Rs. 5-6-0 | Rs. a. p. |
| | | | Extra cost @ Re. 0-2-0 for 1,056 Cft. | | | 132 0 0 |
| II. Scantlings 2"×1½" ... ... | 212 Cft. ... | ..... | ..... | 126 @ Rs. 5-2-0 ... | 86 @ Rs. 4-6-0 | |
| | | | Extra cost @ Re. 0-12-0 for 126 Cft. ... | | | 94 8 0 |
| III. Scantlings 3"×2" and 4"×2" ... | 1,142 Cft. ... | ..... | 118 @ Rs. 4-14-0 | 362 @ Rs. 4-14-0 .. | 662 @ Rs. 4-6-0 | |
| | | | Extra cost for 480 Cft. @ Re. 0-8-0 ... | | | 240 0 0 |
| IV. Reepers 2"×1" ... ... | 2,740 Cft. ... | ..... | ..... | 2,740 Rft. @ Rs. 3-12-0 | | |
| | | | Extra cost @ Rs. 1-12-0 per 1,000 Rft. ... | | | 4 12 0 |
| | | | | | Total Extra cost Rs. | 471 4 0 |

*Abstract of Supplies received up to 4th September 1956 (as furnished by V. S. Division).*

| Sl. No. | Names of Suppliers | Planks $1\frac{1}{2}$" thick | Scantlings | | | Reepers 2" × 1" |
|---|---|---|---|---|---|---|
| | | | 3" × 2" | 4" × 2" | 2" × $1\frac{1}{2}$" | |
| | Messrs.— | C.ft. | C.ft. | C.ft. | C.ft. | R.ft. |
| 1 | A. K. Ahmed ... ... | 4,977 | 1,791 | 903 | 886 | 29,930 |
| 2 | Azeez & Co. ... ... | 13,230(*a*) | 2,039 | ... | ... | 59,580 |
| 3 | Abdul Mazid ... ... | 2,254 | ... | ... | ... | ... |
| 4 | Murthuza Beig ... | 1,794 | 1,850 | 46 | 760 | 22,000 |
| 5 | Kempiah & Sons ... | 5,058 | 398 | 316 | 86 | 5,700 |
| 6 | D. Subba Rao .. ... | 25 | ... | ... | ... | ... |
| 7 | Thimme Gowda, Hassan ... | ... | 237 | ... | ... | ... |
| 8 | Lavappa, Hassan ... | ... | 1,724 | 1,001 | 49 | ... |
| | | 26,338 | 8,039 | 2,266 | 1,781 | 1,15,210 |
| | Cost ... | Rs. a. p. 1,33,019 4 0 | Rs. 37,963 | Rs. 10,388 | Rs. 8,893 | Rs. 3,999 |

ABSTRACT.

| | | Rs. | a. | p. |
|---|---|---|---|---|
| Planks | ... | 1,33,019 | 4 | 0 |
| 3" × 2" | ... | 37,963 | 2 | 0 |
| 4" × 2" | ... | 10,388 | 4 | 0 |
| 2" × $2\frac{1}{2}$" | ... | 8,893 | 2 | 0 |
| 2" × 1" | ... | 3,999 | 4 | 0 |
| | | 1,94,263 | 0 | 0 |

(The correctness of this table is to be verified specially with respect to (*a*).

*Total Purchase of Centering Materials.*

| Period | Planks | Scantlings | | | Reepers |
|---|---|---|---|---|---|
| | | 3″×2″ | 2″×1½″ | 4″×2″ | |
| 1. From 10/53 to 18th January 1954 .. | *1,671 | 1,939 | 705 | ... | 50,320 |
| 2. From 19th January 1954 to 21st June 1954 | 6,739 | 1,893 | 847 | 826 | 37,640 |
| 3. From 22nd June 1954 to 15th March 1955 | 2,653 | 1,662 | 149 | 46 | 25,660 |
| 4. From 16th March 1955 to 18th June 1955 | 3,815 | 826 | 212 | 316 | 2,740 |
| 5. From 19th June 1955 to 30th October 1955 | 2,452 | 725 | 49 | 625 | 1,980 |
| 6. From 31st October 1955 to 31st August 1956 | 5,201 | 977 | 49 | 485 | 4,000 |
| Total ... | 22,531 | 8,022 | 2,012 | 2,298 | 1,22,340 |
| | | Total ... 12,331 | | | |

* This includes a purchase of 442 cft. of planks made on 16th January 1954.

*Purchase of Junglewood Planks and Scantlings.*

30. The rates were fixed in the first instance on quotation basis and purchase made. The firm quoting lowest had not stock when materials was (sic) needed and had to wait till supply from their principle (sic) in Malabar, supplied this material by Rail.

31. M/s. Kempiah Sons & Co., had plenty of Stock of this materials surplus over their requirements for Accountant General's Office building. The same quality new materials were readily available with M/s. Kempiah Sons & Co., hence the purchase was made at the lowest rates secured on quotation basis.

32. Forest Department was consulted if they could supply. They said that they supply only logs, and not cut sizes. Securing logs and cutting charges allowing for wastage, would cost more than the rates secured on quotations.

33. As centering material is used number of times from work to work and finally becomes waste-wood and has to be disposed of as fuel finally.

34. Sanction is solicited to the purchase at a cost of Rs. 1,55,000. Separate report will be submitted for purchase made subsequently when further quantity was found necessary.

Sd. M. MUNIAPPA,
4-9,
*Special Engineer,*
*Vidhana Soudha Division.*

*Counting of Planks on 24th November 1956.*

As per letter No. V.C. 568—56-57 directing the Special Engineer to arrange for the stock-taking of J.W. Planks under the supervision of the Accounts Officer or his representative, the planks available in the various sub-divisions, *including the ones used on works, such as water tank, fixed in the dome work, fixed in the ceilings of Council and Assembly Halls,* were got measured in my presence and in the presence of the Accounts Superintendent and the Accountant on 24th November 1956 in various sub-divisions. An analysis of the abstract measurements is given below. The broken planks had been heaped up in six places, *i.e.*—

Three heaps in No. 4 Sub-division,
Two heaps in No. 3 Sub-division,
One heap in No. 1 Sub-division.

2. These heaps were got measured as such and it is seen from the reports of the Assistant Engineer that they have deducted only 10 per cent for voids regarding these heap measurements.

3. Other planks wherever made available were got counted and measured individually. The abstract of the counting results are noted below:

**No. 1 Sub-division**

| | | |
|---|---|---|
| One heap measurement ... | ... | 2,685 cft. |
| Less 10 per cent for voids ... | ... | 268 ,, |
| Net | ... | 2,417 cft. |
| Other planks and cut pieces ... | ... | 438 |
| Total | ... | 2,855 cft. |

**No. 3 Sub-division**

| | | |
|---|---|---|
| Heap measurements (2 heaps) ... | ... | 1,434 cft. |
| Deduct 10 per cent for voids ... | ... | 143 ,, |
| Net | ... | 1,291 cft. |
| Other planks and cut pieces including furniture and inclusive of 735 cft. used or to be used for the Council Hall ... | ... | 854 cft. |
| Total | ... | 2,145 cft. |

**No. 4 Sub-division**

| | | |
|---|---|---|
| Heap measurements (3 heaps) ... | ... | 2,266-2/3 cft. |
| Deduct 10 per cent for voids ... | ... | 226-2/3 ,, |
| Net | ... | 2,040 cft. |
| Other planks, cut pieces, furniture, etc. | ... | 1,337 ,, |
| | | 3,377 cft. |
| No. 5 Sub-division—planks ... | ... | 720 cft. used and reserved for use in the Assembly Hall. |
| Grand Total | ... | 9,097 cft. |

| | |
|---|---|
| Heap measurements | 5,748 cft. |
| Others | 3,349 ,, |
| | 9,097 ,, |

4. The total quantity of planks purchased in the division is 22,531 cft. according to our account.

5. It may be seen that in the quantity counted, the heap measurements form a major portion. The deduction of 10 per cent for voids is in my view insufficient as heaps were found to be full of void. The correct measurement would be less than 9,097 cft.

6. On 3rd December 1956 the Executive Engineer wrote to me that 2,599 cft. of planks were used for boiler in wood section and 1,512 cft. were sold. Adding these to 9,097 cft. the total comes to 13,208 cft. Still it leaves a deficit of 9,223 cft.

7. The Store-keeper told me that in the material sold, the percentage of broken pieces of planks was only 5 per cent to 10 per cent, and the rest were broken pieces of scantlings. The Executive Engineer has taken 80 per cent as planks. This I think is incorrect.

8. It is difficult to accept the statement that 80 per cent of the materials used in boiler were planks.

9. Out of the broken and useless scantling material, the largest percentage would be of scantlings and reepers.

10. The Supervisor, Sub-division No. 2, who has acknowledged receipt of the material for boilers, has not referred to planks but to junglewood pieces.

CHAPTER XV (e) ANNEXURE LVI.

**Short notes on tenders received for the work of providing Sound Reinforcement System for the new Assembly and Council Halls of Vidhana Soudha, Bangalore.**

Tenders were invited by the Stores Purchase Committee *vide* enquiry No. 13662 for supply, and installing of SOUND REINFORCEMENT SYSTEM for the Public Address and simultaneous interpretation system of Dual Languages separately required for the New Assembly and Council Halls of Vidhana Soudha, Bangalore. Only 5 tenders were received as follows :—

(1) Messrs. Chicago Telephone Radio Co, Bangalore.
(2) ,, General Radio and Appliances, Bangalore.
(3) ,, Philips Radio (Madras) Ltd., Bangalore.
(4) ,, Chopra Radio Electric Co, Bombay, and
(5) ,, Union Radio Company, New Delhi.

TENDERED RATES.

| | *House.* | | *Public Address Sound Reinforcement system.* | | *Dual language Sound Interpretation system.* | |
|---|---|---|---|---|---|---|
| Messrs. Chicago Telephone Co. | Lower | ... | Rs. | 1,21,794 | Rs. | 1,47,403 |
| | Upper | ... | Rs. | 95,624 | Rs. | 1,21,139 |
| Messrs. General Radio and Appliances. | Lower | ... | Pds. | 4,201-16 | Pds. | 3,027-16 |
| | Upper | ... | Pds. | 5,350-5-6 | Pds. | 4,171-5-6 |

F.O.B. UNITED KINGDOM PORT FOR SUPPLIES ONLY.

| | | | | | | |
|---|---|---|---|---|---|---|
| Messrs. Philips Co. (Madras) Ltd., Bangalore. | Lower | ... | Rs. | 41,744 | Rs. | 65,922 |
| | Upper | ... | Rs. | 20,424 | Rs. | 44,602 |
| | | | PLUS Rs. 3,000 and Rs. 2,000 for the Upper and Lower Houses being the extra cost for the Amplifier Rack for extending the equipment by 50 per cent for both the houses. | | | |
| Messrs. Chopra Radio Electric Co., Bombay. | Lower | ... | ... | ... | Rs. | 84,779 |
| | Upper | ... | ... | ... | Rs. | 70,308 |

FOR SUPPLY AND INSTALLATION.

| | | | | | | |
|---|---|---|---|---|---|---|
| Messrss. Union Radio Co., New Delhi. | Lower | ... | Rs. | 1,47,729-12 | Rs. | 1,70,842-10 |
| | Upper | ... | Rs. | 1,12,077-12 | Rs. | 1,37,250-15 |

The enquiry definitely calls for supply and installation of the equipments complete with a guarantee of 365 working days for the satisfactory working of the system. Contrary to this tender specification, Messrs. Chicago Telephone Company, and Messrs. General Radio & Appliances Co, and Messrs. Philips Co. (Madras) Ltd., have quoted only for the supply of the equipment without quoting for the installation and servicing. Messrs. Chicago Telephone Company, quote a delivery period of 9 months after receipt of import licence order and Messrs. Philips require 8 months time aftr the date of receipt of import license order, provided the order is received by them before the end eof October 1955. They expect the consignments to reach India by about September 1956 depending upon the shipping conditions, and a further period of four weeks for the installation of the equipments. Messrs. Chopra have quoted a delivery period of 16 weeks from the date of order and import licence and have quoted for wiring and instalation of the equipment in a complete manner. Similarly Messrs. Union Radio and Appliances, New Delhi have quoted a delivery period of five months and for also completely installing the same and servicing, etc.

On a purview of the 5 quotations, it filters down tocomparing only 2 quotations *viz.*, that of Messrs. Union Radio Appliances, New Delhi and Messrs. Chopra Electric Company, Bombay which are the only two firms whose tender specifications are for bothsupply as well as installation and servicing,—even though Messrs. Chopras are defective in the sense that they have not quoted for the Public Address System as desired in our tender. But in the quotatton of Messrs. Chopra for Dual Language Similtaneous Interpretation system, the following omisisions are to be taken consideration of :—

(*a*) The Micro arrangements are manually operated by the Operator by purring the switch as against the Automatic arrangement by Relay system quoted by Mesrs. Union Radio and Appliances as desired in our specifications.
(*b*) Our specifications call for equipments having two iguages simultsaneous translating facility. Messrs. Chopras have designed theirequpment in such a manner as to translate only one language.
(*c*) Our specifications call for 100 Nos. Loud Speakers to be fixed behindthe members chairs. Messrs. Chopras omit this and have provided EAR PHONES in addition to Head Phones which are not required, whereas Messrs. Union Radio and Appliances fulfil this specification in a complete manner.
(*d*) The rack equipment required for simultaneous two-language translation facility will be different from that of Single Language facility. Hence there will be extra cost thus requiring additional wiring and additional cost. Our specifications call for an, equipment designed especially for taking an increased load of additional 50 per cent Microphones and 50 per cent load of speakers on a future date.

For this Messrs. Chopras require Rs. 7,930 and Rs. 4,705 extra for the Lower and Upper Houses respectively, the wiring and installation charges being further extra whereas Messrs. Union Radio and Appliances, New Delhi have quoted for an equipment which will take this additional load of 50 per cent on any future date.

The testing instruments and spare parts and Tools quoted by Messrs. Chopras consists o Rs. 3,000 as against Rs. 7,200 quoted by Messrs. Union Radio and appliances. Hence under the above headings there will be an additional cost of about Rs. 57,835 for the Lower House and Rs. 37,970 for the Upper House in addition to the quoted figure of Rs. 84,779, and Rs. 70,308 respectively.

Messrs. Chopras, Bombay have quoted for the equipment manufactured by Messrs. Stromberg-Carlson, Ltd., U.S.A. Apart from this being a Dollar Area, the firm is not in a position to quote a single instance in which this equipment has been installed anywhere in India as required in para 16 of our specifications. The firm have not got the reputation of having executed similar works using this equipment and so this will be first of its kind and it is not advisable to experiment on a system of equipment of which we have no knowledge and specially for being installed in an important building like Vidhana Soudha.

After a careful consideration of the design of the equipment and their Technical details and comparing the same to our specifications, it is found that the tender specifications of Messrs. Union Radio and Appliances have specified all our requirements and to their credit they have quoted the equipment manufactured by Messrs. Tennoy, Ltd., London whose equipments have very successfully been installed in the Loka Sabha *i.e.*, Parliament, New Delhi, Trivandrum and in the Parliament of London, Westminster hall, House of Commons, Ottawa, Canada and for the New United Nations Building in New York for the Multi-language interpretation equipments. Hence the equipment is of a very good repute and can be relied upon. The firm is ready to start the work immediately and has also promised to improve over the delivery period. Messrs. Union Radio and Appliances have installed such equipment in the Lower House, Delhi and Parliament House, Trivandrum, to the entire satisfaction.

Their quotation for the simultaneous Dual Language Interpretation system for Rs. 1,70,843 for the LOWER house and Rs. 1,37,351 for the UPPER house can be reduced without affecting the efficiency by nearly Rs. 58,000 in the shape of two sets of testing instruments, Two sets of Tools, Two sets of spares and TWO Recording instruments, each costing Rs. 21,000 and the quotation for the installation is THOROUGH in all respects with all details complete including Loud Speakers for all the 15 Ministers, distributed in the First, the Second and the Third floors to hear the proceedings of the Session from their offices either from Lower or from the Upper House. The total amount for both the Houses may come up to Rs. 2,55,000 as against that of Messrs. Chopras which will come to about Rs. 2,53,000 when all the omissions in their quotations are added on to the quoted figure. The tape recorders can be ordered from a different firm.

Sd. S. V. RAMA RAO,
21—12—1955
*Superintendent, BPL, City Area.*

CHAPTER XV (*g*)—ANNEXURE LVII.

Details for the receipt of casuarina poles from different contractors up to the end of September 1954.

| | Name of the Contractor | Order No. and Date | Quantity for which orders were placed | Quantity Supplied | Date of completion of supply |
|---|---|---|---|---|---|
| 1 | Hanumantharayappa ... | 1669-70 of 24-11-1953. | 100 0 0 0 | 100 0 0 0 | 26—12—1953 |
| | Do .. | 2054 of 28-12-1953 ... | 100 0 0 0 | 100 0 0 0 | 13—1—1954 |
| | Do ... | 2395-6 of 28-1-1954 ... | 100 0 0 0 | 100 0 0 0 | 10—3—1954 |
| | Do ... | 2706 of 20-2-1954 ... | 100 0 0 0 | 100 0 0 0 | 30—3—1954 |
| | Do ... | Order of 1-4-1954 ... | 300 0 0 0 | 183 13 3 0 | 28—5—1954 |
| | | | 700 0 0 0 | 583 13 3 0 | |
| 2 | R. Shankarappa ... | 1696-7 of 25-11-1953. | 100 0 0 0 | 100 0 0 0 | |
| | Do ... | 2033-4 of 23-12-1953. | 100 0 0 0 | 100 0 0 0 | |
| | Do ... | 2705-8 of 20-2-1954. | 100 0 0 0 | 100 0 0 0 | 25—3—1954 |
| | Do ... | 3003-4 of 6-3-1954 ... | 200 0 0 0 | 200 0 0 0 | |
| | Do ... | 3067 of 12-3-1954 ... | 200 0 0 0 | 200 0 0 0 | 20—4—1954 |
| | Do ... | 198 of 9-4-1953 ... | 200 0 0 0 | 206 13 3 0 | 25—8—1954 |
| | | | | 906 13 3 0 | |
| 3 | Doddabyrappa ... | 1930-1 of 14-12-1953. | 100 0 0 0 | 99 12 0 0 | 14—6—1954 |
| 4 | Muniappa ... | 1900-1 of 11-12-1953. | 100 0 0 0 | 117 2 2 0 | 12—7—1954 |
| | Total ... | ... | 1,800 0 0 0 | 1,707 2 0 0 | ... |

CHAPTER XV (h)—ANNEXURE LVIII.

SRI RAMA METAL WORKS.

*Engineers and Contractors.*

*Ref. SPEX—R.C.—75.*

*168, Subedar Chattram Road,*
*Bangalore-2, 18th February 1956.*

MY DEAR SRI MUNIAPPA,

I am writing to you this personal letter with a view to impress upon you the urgency of the matter and with a hope that you as Sri Muniappa might do a little justice for my case.

I wanted to avoid so far to go into the controversy of the levy of penalty as I was feeling that behaviour of department would be something business-like.

As already stated in our letters that our amount of Rs. 8,090 *plus* the amount of Rs. 1,000 (the deposit amount) is still lying with you. Do you know that this balance represents about 45 per cent of the total work done by us in your department. Can you imagine that we can hardly afford to see so much amount in dispute when we have done more than anybody else could have done under the circumstances to help the department, when they were not in a position to supply steel.

I think that I will have to remind you the facts relating to this case right from the beginning.

Looking to the closing date, when the tenders for this job were invited, we find that it is 28th February 1955. So from this 28th February 1955 to 7th June 1955 when the final agreement was executed a period of so many days had elapsed. Where was the urgency then? You know all these days we were not prepared to bind down ourselves with your penalty clause as the steel position was very difficult. Ultimately promises were given to us that you would help us in securing the steel and we signed the agreement in good faith. When you said that without *inserting penalty clause which is only nominal* no departmental work could be issued—we are really surprised now that, you knowing all these facts are now insisting on the "Pound of Flesh".

No promise given.

For Remarks.
Sd. M. M.

Secondly there was lot of inconveniences so far the working space was concerned and the procurement of power at site. Can you deny that you agreed with us to get us the necessary place in your premises and power and subsequently this arrangements failed and we had to bring our men and materials back to our workshop after having worked there a few days as no power could be made available to us.

How could any clause be nominal. It always means what it conveys.

3. Is it not clear from the agreement that the quantity allotted to us was only approximate and when you disappointed us in getting the necessary steel materials and failed to give us power and place. You yourself suggested that we could do as much as we could; depending upon the availability of materials as to complete the quantity of 15,000 Cft. was not binding it being only approximate.

For orders.
Sd. K. T. V.

Put up note on this ground.
Sd. M. M.

4. Now about the painting of the racks that have been so far manufactured by us:—

Could you please deny that for painting, a clean and a clear space is required. Is this available to us? Is the floor of the Hall where these racks are erected is full with cement and it is a through passage, all type of people with all kinds of stores passing in and out.

5. All the same we are prepared to paint these racks in these circumstances but we cannot hold ourselves responsible for the painting job becoming dirty. Do you agree to this?

No. 6. Is it not a fact that the racks were completed by us long back probably within the time but because of no definite length, height, etc., issued by you earlier in time, a lot of rectifications had to be done which itself has put us in great loss.

7. Can you deny that even the original plans given to us for spacing the racks had to be changed repeatedly.

Put up draft reply that if there is any such condition in the agreement, he may claim it
Sd. M.M.

Mr. Muniappa you know too well that it is humanly impossible in these days to commit for iron and steel when Government Policy with regard to controls and distribution of this item keeps on changing every day and when the Government themselves are requiring these materials for five years plans, etc.

For orders.

Have you been able to issue the materials till today for the similar job for which our quotation have been accepted on 8th August 1955. Would you pay us the damage for all these? Therefore we request you to kindly be good enough to waive this penalty clause as we are not at fault and we have been doing our utmost to paint these racks if the space is given to us. The assembly of the racks having been long back completed.

With thanks,

Yours faithfully,

For SRI RAMA METAL WORKS.

(Sd.) ..... .....

To

SRI MUNIAPPA,

*Special Engineer, Vidhana Soudha, Bangalore.*

*No. T. No.* 6852—*Vs. dated 23rd February* 1956.

Copy forwarded to Assistant Engineer, No. 3, for report on conditions of agreement relating to manufacture of racks.

Sd. M. M.
20/2.

SREE RAMA TRADING CO.,
No. 533, Lalbagh Road, Bangalore-4.

29th February 1956

To

The Special Engineer,
Vidhana Soudha Division,
Bangalore.

Dear Sir,

With reference to your letter No. 6805—V.S., dated 20th—21st instant but received by us on the 25th February 1956 we are very much surprised to observe to your statement saying that we have only few workmen and that we have stopped the work from 15th February 1956 alleging that you have kept at our disposal all the materials required, etc., and to state that what you have referred to is absolutely false for we have a good command of labour and that we have not stopped our work at all at any time and the slackness of our work is purely due to your not placing with us the materials required and that you have been keeping at our disposal small quantities now and then and such of the materials we have placed with us have been promptly used and completed and if there be any delay, it is purely due to our not getting the materials in time. Quick execution and mass production could therefore be expected if good quantity of materials are placed with us.

In this connection we refer you to our letter dated ..... wherein we have complained the delay in getting the materials which letter you kept unreplied. We are always therefore prepared and assure you quick execution in time if only our requirements are met with as and when we make a request.

In the circumstances, we request you kindly to place with us all the materials you have just received and if this is done, we assure you prompt execution and completion. Hence the question of imposing penalty does not arise in our case for the simple reason that if there is delay it is purely due to our not getting the required materials from you.

Yours faithfully,

For Sree Rama Trading Company,

(Sd.) B. ANJANAPPA,
*Proprietor.*

" Copy "

*Steel Racks*

*T. No. 7577-78--V.S./21st March 1956*

To

M/s. Sree Rama Trading Co.,

Bangalore-4.

**Steel Racks for V.S.**

Sir,

With reference to your letter No. nil, dated 29th February 1956, regarding manufacture of Racks, etc., I write to state that it is reported by the A.E. that there were no labourers working on 15th February 1956 and only a few labourers were working on other days, even when you had adequate quantity of material at your disposal. Your statement that the supply of material is not being made properly, cannot be considered as correct. During the inspection of the undersigned on several days, I found only a small number of men were working.

From the report of the A.E. it is seen that nearly 2,773 ft. of $1\frac{1}{2}'' \times 1\frac{1}{2}'' \times \frac{3}{4}''$ M.S. angles have been supplied to you about 2 weeks ago and a further quantity of 100 Nos. of 37′ long $1\frac{1}{2}'' \times 1\frac{1}{2}'' \times \frac{1}{4}''$ M.S. angles is being given to you since 6th March 1956.

Therefore you are requested to proceed with the works and complete the same as per specification in time.

Yours faithfully,

(Sd.) .....

*Special Engineer, V.S. Division.*

Copy to A.E. 3 for information.

(Sd.) .....

19-3-56

*Special Engineer.*

" Copy "

CHAPTER XVII (b)– ANNEXURE LIX.

COPY OF THE NOTE OF THE STORE KEEPER.

Loan of Cement to M/s. Kempiah & Sons.

Issue of cement to contractors on loan basis is opposed to rules.
We can issue departmental materials on sale accounts only.
I submit this for orders.

Sd/—
S.K.
23/8.

(Initialled) C.J.D.
24/8.

For opinion if this can be issued as a special case.

(Sd.) M. M.
24/8.
*Special Engineer.*

The rules do not contemplate of loan and when there is no rule to allow loan, it will not be correct to give any thing on loan.

For orders.

(Sd.) A. T. V.
24/8.
*Accountant.*

This is in vogue now. May be continued only in urgent cases.

(Sd.) M. M.
24/8.
*Special Engineer.*

## CHAPTER XVIII—ANNEXURE LX.

GOVERNMENT OF MYSORE.

Office of the Secretary,
Vidhana Soudha Committee, Victory Hall,

No. V. C. 77/56-57. *Bangalore, dated 20th August 1956.*

To

The Secretary to the Government of Mysore,
Public Works and Electrical Departments,
BANGALORE.

SIR,

I am directed to send herewith a Preliminary Report of the Committee dated 20th August 1956.

Yours faithfully,

Sd. K. S. MALLE GOWDA,
*Secretary.*

MEMO

No. V. C. 78-79/56-57. *Bangalore, dated 20th August 1956.*

Copy is forwarded to—

1. The Chief Engineer of Mysore, Bangalore.
2. The Special Engineer, Vidhana Soudha Division. for information.

Sd. K. S. MALLE GOWDA,
*Secretary.*

### PRELIMINARY REPORT.

1. The Vidhana Soudha Enquiry Committee commenced its work on 4th August 1956, and inspected the Vidhana Soudha on 6th August 1956. The Chief Engineer, the Government Architect and the Special Engineer in charge of the construction explained to us in general, the features of the scheme and showed us round.

2. We found that a large number of items of work had almost reached the stage of completion. We therefore decided to take up for immediate examination the third term of reference which is as follows :

" to examine the possibility of effecting economies in further expenditure on the work."

3. On 6th August 1956, we suggested to these officers that further execution of the work on items which can conveniently be deferred should be deferred. We particularly brought to their notice the 'Conference Room' in the Northern Wing and the Motor Garages. No finishing work was started in the Conference Room by that date and we now find that further work has been done. Similarly, with regard to the Motor Garages, the work is progressing rather rapidly.

4. By a letter dated 7th August 1956, the Chief Engineer and the Special Engineer were requested to indicate their views as regards the steps to be taken to effect economies in further expenditure. Their reply is awaited.

5. With the third term of reference mainly in view, subsequent inspections were also made with the engineers and other officers in charge of the work. At our inspection on 17th August 1956 —the Government Architect and the Special Engineer being present, we went through a list of items of work on which economies are possible. A list with our observations regarding each of these items is enclosed. A copy of this list is being sent to the Chief Engineer and the Special Engineer.

6. The estimate of Rs. 130 lakhs includes an item of Rs. 11 lakhs for wood work and furniture the break up of which is Rs. 8·7 lakhs for doors and windows and Rs. 2·3 lakhs for wood work in the Assembly Halls and the Cabinet Room. This estimate is said to be under revision adding the following items :—

| | | Rs. |
|---|---|---|
| (*a*) | Furniture for the Chief Minister's Room ... | 1,00,000 |
| (*b*) | ,, for the Cabinet Room... ... | 35,000 |
| (*c*) | ,, for the rooms of the Ministers and the Secretaries. | 1,50,000 |
| (*d*) | Additional Embellishments ... ... | 75,000 |
| | Total Rs. ... | 3,60,000 |

The provision for wood work and furniture as per the proposed revision is thus Rs. 5,90,000. This provision appears to be abnormally excessive, and it should be possible to effect considerable economies in this expenditure without loss of efficiency. The Committee is not able to know the progress on these items of work. It is of the opinion that further expenditure on these items should be stopped, pending detailed examination.

7. As regards item No. 8, we understand that the total estimated expenditure is about Rs. 11·5 lakhs, stated to include the following items—

| | | | Rs. |
|---|---|---|---|
| Garden ... | ... | ... | 5,00,000 |
| Road Formation | ... | ... | 75,000 |
| Fountains and Layout | ... | ... | 1,50,000 |
| Concrete Roads | ... | ... | 4,20,000 |
| | Total Rs. | ... | 11,45,000 |

No detailed estimates were available. The Committee feels that it ought to be possible to effect substantial savings on these items amounting to about Rs. 5 lakhs.

8. As regards item No. 9, estimates were not made available to the Committee. This item is not also included in the estimate of Rs. 130 lakhs. This work can be easily deferred till the possibility of utilisation of old furniture and effecting other economies is examined.

9. As regards item No. 10, estimates were not available to the Committee. But the Committee is of opinion that considerable savings can be effected under this item also.

10. The Committee understands that estimates for electrical installations are being revised from Rs. 8 lakhs to Rs. 12 lakhs. The Committee cannot offer any remarks regarding this as estimates have not yet been made available to it. It is understood that item No. 11 is even outside the estimate.

11. The Committee understands that there is a stock of sandal wood and ivory meant for fabrication and inlay work. The use of these materials is not considered necessary.

12. We would also like to make special mention of the saving of about Rs. 3 lakhs which we consider possible in the Main Tower and Dome by a suitable modification in design and materials. This was discussed with the Government Architect and he considers such saving possible.

13. The Committee is of the opinion that the Government should issue immediate orders to stop all further expenditure on these items pending our further examination and final report.

Sd. P. P. DEO,
*Chairman.*

Sd. B. S. RAGHAVENDRA RAO,
*Member.*

Sd. M. NARASIMHAIYA,
*Member.*

*20th August 1956.* *Secretary.*

Statement showing items of works on which economies are possible.

| *Sl. No.* | *Name of work and sub heads* | *Stage of work* | *Amount of savings* | *Remarks* |
|---|---|---|---|---|
| 1 | 2 | 3 | 4 | 5 |
| | MAIN ESTIMATE OF 130 LAKHS | | | |
| 1. | Construction of Garages.— | | Rs. | |
| | (i) Capitals on either side of pillars | Not started | 1,875 | Item 3 (*d*) of Garage Estimate for 1·5 lakhs. |
| | (ii) Ornamental coving to ceiling | Partly done | 2,000 | Item 7 (*b*) do |
| | (iii) Providing beading to beams | Do | 600 | Item 7 (*c*) do |
| | (iv) Stone finish to front face of beams | Not started | 1,000 | Item 7 (*d*) of Garage Estimate for 1·5 lakhs and further proposals of treatment with Verona finish. |
| | (v) Improved type of Red Oxide flooring. | Do | 3,000 | Item 8) of Garage Estimate for 1·5 lakhs and later contemplation for improvement. |
| | (vi) Special treatment of tile pavement to top of terrace. | Do | 5,000 | Item (ii) of estimate and contemplated improvements. |
| | (vii) Special Phalmane dressing for front face of pillars. | Do | 1,000 | Not in the estimate, but contemplated. |
| | | Total | 14,475 | |
| 2. | Northern wing of the Main Structure. | | | |
| | (i) Installation of ornamental Dharma Chakras in the niches of the Northern face of main portico. | Not yet done | 1,000 | To be less ornate. |
| | (ii) Wooden panelling for wall face on either side of the main door for the Library Hall. | Do | 3,000 | Contemplated. |
| | (iii) Mosaic finish to the landing and railings of secondary staircases. | Steps finished in some stairs. | 5,000 | Modifications in treatment are possible, especially for the flooring for the staircase landing and the railings of staircase. |
| | (iv) Floorings for the portico top in first floor. | Not done. | 1,000 | Proposed Mosaic flooring to be changed over to ordinary type. |
| | (v) Pillars in front of "Party" room, and adjoining the portico. | Finish for pillars to be done. | 1,000 | The proposed Mosaic finish to be changed to plain type. |
| | (vi) Flooring, Ceiling, Ornamental Cornice and other artistic features in Conference Hall. | Not yet done. | 25,000 | Omission of further decorative work contemplated along with austere treatment to flooring and ceiling, and *omission* of ornamental cornice. |
| | (vii) Special ornamental stone parapet on either side of Swatantra pediment. | Originally done and change over contemplated. | 3,000 | The original "Conch" pattern parapet, already done, to be restored and retained. |
| | (viii) Special flooring with tiles over portico terrace. | Only base course done. | 500 | The terrace to be finished with ordinary weather proof treatment. |

| Sl. No. | Name of work and sub heads | Stage of work | Amount of savings | Remarks |
|---|---|---|---|---|
| 1 | 2 | 3 | 4 | 5 |
| | (ix) Special flooring with tiles over open terrace. | Not yet done, | 20,000 | The terrace to be finished with ordinary weather proof treatment. |
| | (x) Ornamental parapet wall over water supply tank. | Do | 1,000 | To be of plain R.C.C. work. |
| | (xi) Miscellaneous works, as special paints, colour effects, etc., wherever contemplated. | Do | 4,500 | |
| | | Total | 65,000 | |
| | Central Portion.— | | | |
| | (i) Ceiling and flooring of the main portico first floor. | Not done | ... 5,000 | The holoplast ceiling and mosaic flooring proposed, to be modified. |
| | (ii) Treatment to Inner pillars of portico. | Do | ... 5,000 | The proposed stone veneering, artistic features for the panels and Mosaic finishes to be omitted, and ordinary treatment to bases and capitals done. |
| | (iii) Flooring of Circular bay or foyar. | Do | ... 3,000 | To be of ordinary finish, instead of mosaic. |
| | (iv) Flooring for Verandah around the Cabinet Room and the Ante Room to Chief Minister's Room. | Do | ... 1,500 | To be of austere type, instead of costly mosaic work. |
| | (v) Furnishing the Chief Minister's Room and Cabinet Room. | Partly done | ... 10,000 | Additional furnishing works still to be done, or to be fixed up, to be omitted. |
| | (vi) Special flooring with tiles over open terrace. | Not done | ... 16,000 | The terrace to be finished with ordinary weather-proof treatment. |
| | (vii) (a) Main tower and dome. | Under progress | ... Three lakhs | Modification in design to reduce the size and height, and treatment of shell of dome, and finish with marble or porcelain Mosaic. |
| | (b) Finials to all domes. | Not done | ... 25,000 | Modified design of simpler type and austere treatment to be done. |
| | viii) Miscellaneous work as colour treatment, special paints, etc., wherever contemplated. | Not done | ... 9,500 | |
| | | Total Rs. | 3·75 lakhs | |
| 4. | Southern Wing.— | | | |
| | i) Mosaic finish to the landing and railings of secondary staircases | Steps finished in some stairs | 5,000 | Modifications in treatment are possible, especially for the flooring of the staircase, landings and railings of staircases. |
| | ii) Flooring for the underside of the two corner towers for conversion as rooms. | Not yet done | ... 10,000 | Contemplated to be of wooden type. |
| | iii) Special flooring with tiles over open terraces. | Do | ... 20,000 | The terrace to be finished with ordinary weather proof treatment. |
| | iv) Miscellaneous works, as special paints, colour effects, wherever contemplated, treatment in Chairman's Tea Room, etc. | Not done | ... 5,000 | |
| | | Total Rs. | 40,000 | |
| 5. | Pavement all round the building. | Not yet done | ... 25,000 | Minimum work of austere type for the optimum protection to the building, adjoining the basement to be done. |
| 6. | Woodwork, furniture and carpets for Cabinet Room, Minister's Rooms and Secretaries Rooms. | Some works done | ... ... | *Vide* remarks in Note |
| | ITEMS FOR WHICH PROVISION HAS NOT BEEN MADE IN THE 130 LAKHS ESTIMATE. | | | |
| 7. | Providing Railings and Steps over the garage roof, ornamental parapet walls. | Not yet done | ... 16,000 | Estimate stated to be a part of the Garden estimate. A simple R.C.C. parapet wall is to be adopted. |
| 8. | Garden, Fountains, Lay-out, Road formation and Concreting of Roads. | Layout, Road formation and concreting of main road in front done. | Five lakhs | *Vide* remarks in Note. |
| 9. | Furniture for all the offices. | Not done. | ... Ten lakhs | This work to be stopped. |
| 10. | Decorative Painting, Art Gallery and Installation of Statues. | Models done | ... Five lakhs | Works to be deferred. |
| 5. | Ornamental street lighting. | ... | 50,000 | |
| | | Total | 20,66,000 | |

NOTE.—The figures shown in the Column of savings are approximate.

## ABSTRACT.

| | | Probable Savings. |
|---|---|---|
| | | Rs. |
| 1. | Works under the estimate for 130 lakhs | |
| (*i*) | Construction of Garages ... ... ... ... | 14,475 |
| (*ii*) | Northern Wing of Building ... ... ... ... | 65,000 |
| (*iii*) | Central Section of Building ... ... ... ... | 3,75,000 |
| (*iv*) | Southern Wing of Building ... ... ... ... | 40,000 |
| (*v*) | Pavement all round the Building and in the Quadrangles ... ... | 25,000 |
| (*vi*) | Woodwork and Furniture ... ... ... ... | ... * |
| | Total ... | 5,19,475 |
| 2. | Works not included in the estimate for 130 lakhs. | |
| (*i*) | Parapet and railings over Garage roof ... ... ... | 16,000 |
| (*ii*) | Garden, lay-out, fountains, formation of roads, concreting of roads, etc. ... | 5,00,000* |
| (*iii*) | Furniture for all the Offices ... ... ... | 10,00,000 |
| (*iv*) | Decorative painting, art gallery, installation of Statues, etc. ... ... | 5,00,000 |
| (*v*) | Ornamental Street Lighting ... ... ... | 50,000 |
| | Total ... | 20,66,000 |
| | Grand Total ... | 25,85,475 |

(Sd.) M. NARASIMHIAH, *Member.* (Sd.) B. S. RAGHAVENDRA RAO, *Member.* (Sd.) P. P. DEO, *Chairman.* (Sd.) K. S. MALLE GOWDA, *Secretary.*

**Vide* Remarks in Note.

**CHAPTER XVIII—ANNEXURE LXI.**

GOVERNMENT OF MYSORE.

No. P. W. B. 4386-Encl : 1.

Mysore Government Secretariat,
Dated, Bangalore, 25th August 1956.

From

The Secretary to Government of Mysore,
Public Works Department,
Bangalore.

To

The Secretary,
Vidhana Soudha Enquiry Committee,
Bangalore.

Sir,

I am directed to refer to your letter No. V.C. 77/56-57 dated 20th August 1956, forwarding the preliminary report of the Committee about the third term of reference to the Committee. Government have accepted the recommendations of the Committee in this behalf except for the modifications indicated in the annexed statement. Instructions have been issued to the Chief Engineer to take immediate action in this behalf.

Yours faithfully,

(Sd).
*Secretary to Government*
*Public Works Department.*

Statement of modifications ordered by Government in regard to itemised proposals for economy on works connected with Vidhana Soudha.

*Reference.*—Statement annexed to the Preliminary report of the Vidhana Soudha Committee.

(1) *Construction of garages.*—In view of the fact that the remaining garages are half done and only roofing has to be completed, the work of these garages also may be completed, especially as they will be required for the large number of motor vehicles expected to be in use when the building is occupied.

(iii) Simplest possible beading may be provided.

(2) *Northern wing of the main structure.*—(iii), (iv) and (v) — As mosaic flooring has already been provided to the surrounding areas and to other similar works, the same kind of flooring (cheapest possible mosaic) may be provided in these areas and to those items of work also.

(vi) There are only about six pillars remaining which have to be finished in the same manner, as the rest have been. As it is desirable to have uniform construction for all pillars, the remaining pillars may also be finished in the same manner. The simplest type mosaic flooring and the cheapest possible ceiling may be provided as suggested by the Committee. It is not proposed to use carpets for the flooring. Cornice work having been started and executed to some extent, the whole of the work may be completed in the same manner.

(vii) and (ix)—Comparative costs of ordinary weather-proof treatment and two inch cement concrete which the Chief Engineer recommends may be worked out and the matter examined further.

(3) *Central Portion.*—(i), (ii), (iii) and (iv) —The ceiling of the main portico in the first floor may be finished with ordinary type cement mortar to match the ceiling of the foyar hall. The flooring in all the areas referred to may be of the same mosaic with which the surrounding areas have been provided in order to secure uniformity.

(vi) Same observations as for items (vii) and (ix) under 2.

(vii) The central dome may be redesigned to the extent possible so as to reduce the cost to the minimum and the savings that may be effected worked out. Austere treatment may be given to dome finials as proposed by the Committee.

(viii) Spray painting may be done only for the Assembly Hall and the other works dropped.

(4) *Southern wing.*—(i) Mosaic finish as in the surrounding areas may be given in order to secure uniformity.

(ii) Flooring may be provided under the remaining two domes as flooring has already been done in two other cases and as this will secure two additional rooms with little extra cost.

(iii) The same observation as for items (viii) and (ix) under 2 above.

(iv) Spray painting may be done only for the Council Hall and the rest of the work dropped.

8. *Gardens, Fountains, etc.*—The ecomomies possible under this head will be further examined and in the meantime further work will be deferred.

(Sd).
*Secretary to Government, P.W.D.*

In case there had been proper planning, the economy would have been as much as 57·5 lakhs as per details given below. The main items where there would have been considerable economy are as under :—

| | | | |
|---|---|---|---|
| 1. | Building proper | 34·80 lakhs. | By omission of intensive architectural features and embellishments. |
| 2. | Garages | 1·53 lakhs. | With the location of the garages on the N.W. or S.W. side of the Building. |
| 3. | Electric lights and mike arrangements. | 7·8 lakhs. | By having modest and economical provisions for lighting and with single language speech reinforcement system and adhering to the provision in 130 lakhs esti nate. |
| 4. | Forced ventilation system. | 2·0 lakhs. | By dropping the proposal altogether as this was not necessary for Bangalore. |
| 5. | Furnishing the Assembly and Council Halls. | 1·9 lakhs. | By resorting to minimum wood work and furniture necessary, after making use of the available furniture in the Old Assembly and Council Halls. |
| 6. | Levelling the ground. | 2·5 lakhs. | By avoiding the site altogether or with the proper location of two buildings. |

Statement showing the Economy that would have been possible with proper planning.
(Based on the suggestions of the Committee)

(Amount in lakhs of rupees)

| Sl. No. | Item | Cost as per Rs. 130 lakhs estimate | Figures as per revision (Probable) | Probable cost as per suggestions of the Committee | Savings | Remarks |
|---|---|---|---|---|---|---|
| | **(A) Within the scope of the estimate for Rs. 130 lakhs.** | | | | | |
| 1 | Building proper ... | Rs. 107·5 | Rs. 107·50<br>26·30<br>1·00<br>134·80 | Rs. *100·00 | Rs. 34·80 | *Reasonable cost at about Rs. 24 per square foot floor area, omitting intensive architectural features and embellishments. |
| 2 | Construction of garages ... | 1·0 | 2·18 | 0·65 | 1·53 | By locating the garages on the western side, on plain ground. |
| 3 | Electric lights and mike arrangements. | 8·00 | 15·80 | 8·00 | 7·80 | By resorting to the original provisions and single language speech reinforcement system. |
| 4 | Water supply and sanitary works of the building. | 5·0 | 2·20<br>1·50<br>1·59<br>5·29 | 5·15 | 0·14 | With the raw-water supply scheme mainly of filtered water supply in an emergency and with the project for a daily consumption of 30,000 gallons—This would save filtered water and also the cost to be paid to the Corporation. |
| 5 | Forced ventilation system. | 2·0 | 2·00 | ... | 2·00 | By dropping this item, as this was not necessary for Bangalore. |
| 6 | Electric lifts ... | 2·0 | 2·00 | 1·75 | 0·25 | By placing the entire order together. |
| 7 | Furnishing the Assembly and Council Halls. | 1·5 | 5·90 | 4·00 | 1·90 | Retaining the original provision and making use of the available furniture of the old Council and Assembly Halls as intended and with minimum wood work as extra. |
| 8 | Pavement round the building. | ... | 0·40 | 0·25 | 0·15 | By resorting to simple type of store flagging work. |
| | **(B) Outside the scope of the estimate for Rs. 130 lakhs.** | | | | | |
| 1 | Garden and layout ... | 5·00 | 5·0 | 1·04<br>1·00<br>2·04 | 2·96 | The estimate for Rs. 5 lakhs for garden and layout was not fully sanctioned; only minimum cost for garden and for fountains and ponds has been made. |
| 2 | Cement concreting roads around Vidhana Soudha. | 4·23 | 4·23 | 0·75 | 3.48 | Providing for chip carpeting instead of concreting as proposed. |
| | | ... | 9·23 | 2·79 | 6·44 | |

Total Economy:—51·07+6·44 or 57·51 lakhs.

WD 1413—GPB—500—31-1-57